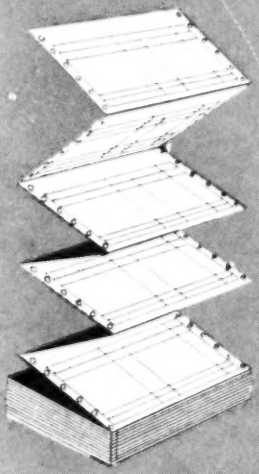
APRIL 1954

The Office

Magazine of

MANAGEMENT • EQUIPMENT • METHODS



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$89.50*

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3. **STURDY** and trouble-free

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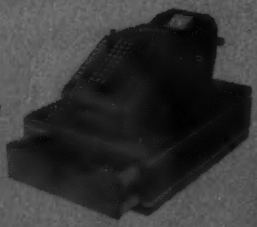
A dependable cash register with adding machine advantages. Models as low as $159.50*



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Please rush further information and tell me where I can see and try your Adding Machine and Cash Register.

Signed_____

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KILL Teletype Machine NOISE!

SOF'TONE
ACOUSTICAL CABINETS
FOR ALL NOISY OFFICE MACHINES

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Sof'Tone **absorbs all high frequency vibrations from noise and reduces the new sound level more than 50%. Teletypes become quieter than a noiseless typewriter. Noise control to be effective starts right where noise begins—at the machine itself. Nerve wracking noise lowers workers' production capacity. Sof'Tone stops this unnecessary waste.**

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Gates ASSOCIATES

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"Any transaction that's worth recording at all is worth putting on paper that will keep the record as well and as long as you need it."

The smallest item in office, shop or field expense is the paper that records are kept on. A paper not up to the job may mean many costly man-hours of copying — an expense more than the cost of all the fine paper you could use in years. For efficiency — which means saved man-hours — the paper and card you use must have a smooth no-glare surface so made that ink won't run or smudge, erasability, uniformity from piece to piece and a toughness that's obtainable *only* in paper made with *new* long, strong cotton fibers. MECHANO FORM LEDGER is made in white and six colors, 13 sizes and four weights. MECHANO FORM INDEX-BRISTOL comes in white and seven colors, five sizes and four weights. The colors match for "color control" — a time-saver if you have several departments, branches or classes of records. The eight weights make it possible for you to get a card or sheet as tough or stiff as you need, and the many sizes mean you can get almost any shape sheet or card you need, without waste. MECHANO FORM is made to match the requirements of either machine or hand bookkeeping.

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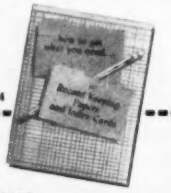

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In these days of government supervision and control of records and documents, many must be kept for years. This new booklet tells how long various types of records should be kept, and what kind of paper is necessary to take the wear, and years of storage, each record must stand. It tells how to set up a continuing *system* of records control and how to save money in buying record-keeping paper and card. Every accountant, treasurer, controller, office manager and bookkeeper should have one. Send for your free copy today.

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Please mail me, without cost or obligation, your new booklet on records systems and retention and getting the right paper or card for various kinds of records. It's called "How to Get What You Need in Record Keeping Papers and Index Cards."

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City or Town ..... State .....

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WILLIAM SCHULHOF, *Publisher*

WILLIAM R. SCHULHOF, *Editor* JAMES GORMAN, *Managing Editor*

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The Steel Building on the Golden Triangle

SIDNEY FELDMAN

OFFICE buildings are springing up in Pittsburgh's downtown business center where the Monongahela meets the Allegheny to flow into the Ohio River. In this tight, three-cornered area, tall and modern business homes of America's iron and steel and aluminum city are being built over a former slum wasteland called the Golden Triangle. One of these skyscrapers is the 525 William Penn Place Building. Unofficially, however, it is known as the United States Steel Building or the U.S. Steel-Mellon National Bank Building. U.S. Steel leases 30 floors of office space and other floors are occupied by the Mellon National Bank & Trust Co., as well as T. Mellon & Sons, the investment firm.

Previously, United States Steel Corp. had its offices scattered through no fewer than ten office buildings. For example, while main headquarters was in the Koppers Building, the public relations department was several blocks away in the Law & Finance Building and still other offices were in the Carnegie Building and many other structures around town. Picture the new ease, pleasure, economy and efficiency resulting from commuting among offices by merely stepping into automatically controlled elevators moving up and down rather than by taxicabs zig-zagging from building to building to the company's offices dispersed through Pittsburgh's crowded, cramped business streets.

The striking appearance of the new building is its external monolithic being as a slab of stainless steel and Indiana limestone rising 41 stories with corner reveals but without setback or projection. The rectangular (inner) core of the structure is devoted to such utilities and services as stairways, elevators, lobbies, lavatories and toilets, mail chutes, main conveyor, air conditioning ducts, communications wiring (including fire alarm and watchman's reporting systems) as well as heating and plumbing pipes—leaving the rest of the office floorspace free of such encumbrances and obstructions to light, ventilation and working space.

A quick tour of U.S. Steel's part of the building would begin from the lowest basement and rise to the main lobby which the company rents in addition to its upper floors. Radiant heating pipes are buried in the sidewalks around the outside of the building to melt winter

snows and help dry rain. A feeling of power and comfort mingles with impersonal efficiency as you enter the high-ceiling lobby through revolving glass doors. Potted plants line the lobby's outer periphery matching plants growing outside the building's tall glass windows. Carbon steel ceiling panels painted "brick red" send light twinkling through pinhole lamps resembling stars. The lobby's elevator corridors, by contrast, are brightly fluorescent lighted.

You can rise to any of the company's thirty floors (from the 9th to the 38th) by one of three banks of elevators, with six cars to the bank. Automatic controls dispatch the fluorescent lighted cars. Upper corridors have contrasting floor tiles, steel ash trays and occasional bulletin boards. Elevators service three tiers of general offices. The first tier is separated from the second by four floors comprising the mailroom, mechanical floor, personnel and medical departments, luncheonette, women's lounges and library. The second tier of general offices has another mechanical floor. The third tier of general offices includes the 38th floor devoted to executives' offices, dining room and kitchen; offices of T. Mellon & Sons on the 39th, and the telephone and telegraph centers occupying parts of the 40th and 41st floors.

Office and utility doors are fireproofed with sheet steel coated with baked enamel blending with adjoining walls. The offices are air conditioned and ventilation further is improved by doors with louvered bottoms. Some doors have center panels of steel or full-length glass inserts which permit more light to enter office working areas. In addition to the fluorescent lighting, daylight enters through 3,300 windows of tinted green glass which absorbs much of the sun's infra-red rays and reduces heat transmission in the summer.

Because steel is the world's basic industry, and because U.S. Steel is this country's (if not the world's) largest individual steel producer, this building has been made a showplace of steel architecture. Since Pittsburgh is the nerve center of this countrywide production and sales enterprise, it handles a tremendous volume of correspondence and communications. Records indicate some 10,000,000 pieces of inter-office and U.S. mail, nearly 4,500,000 telephone calls and more than 3,000,000 wire messages, each year.

Although our industrial and com-

The wire communications center in the United States Steel building in Pittsburgh. The growing importance of wire circuits to clerical work is described on page 80.

mercial civilization is predicated on steel frameworks, it is held together by paperwork and webs of wires. In keeping with the company's activities and its wide scope of services, the north end of the 17th floor of the building contains a reading and reference library which serves all personnel and outside consultants. Noise is reduced by draperies, heavy carpeting and acoustical ceiling. Three librarians are in charge of more than 8,000 books and 400 periodicals containing technical, historical and current news information.

Personal needs and certain comforts, provided for office employees, include personnel and medical facilities, restaurant and luncheonette, washrooms and lounges. Individual desks are used for interviewing and testing in the personnel offices. Next door are medical dispensary facilities which offer first aid and limited medical care to all company workers within the building. Medical installations, as well as those in a barber shop on the same floor, are practically all of stainless steel.

Areas where many employees work are provided with large valet racks, while smaller offices and executives' offices have valets, clothes trees or closets. Washrooms, in the center core of the building, have tile floors and porcelain enameled steel walls. On each floor there are stainless steel towel cabinets for employee use. Men's laboratory-toilets have cream-colored porcelain enameled steel panels. Women's toilet-lavatories have full-length mirrors and glass and marble shelves for cosmetics, purses, etc. Sanitary napkins are available in special dispensers.

A self-service luncheonette is on the 17th floor which also contains the women's lounge and company library. Only company employees may use the luncheonette which can accommodate several hundred persons during the staggered two-hour lunch period.

Here in this stainless steel palace, the offices of top executives are distinguished by the soft appearance of good wood. True, there are many facilities made of steel—including an unusual acoustical ceiling of patterned stainless steel. But mahogany doors and door frames abound, along with rich wood desks and a 40-ft. sectional directors' table with upholstered armchairs to match. The library is the only other place containing as much wood which is of a blond finish.

Although the service core of the building is uniform on each floor, office

Some duplicating equipment in the offices of United States Steel Corp.

A typing pool in the new office building of United States Steel Corp. in Pittsburgh.

space around it is completely flexible through the utilization of movable steel partitions. None of these partitions was put into place until after resilient floor tiles were laid and the outside walls were covered with baked enamel steel panels. Then the steel partitions were placed according to the floor plan of each department, decided upon by each department head who consulted with the company floor layout committee.

Floors are laid on cellular steel units which contain electric and telephone cables that can be tapped in practically any part of the room. Whenever an office layout is redesigned or rearranged, lighting and communications outlets are readily available. Existing space can be re-allocated or new space may be partitioned simply and quickly. Actually, the walls are of all-steel beige or light green painted partitions which come in various sizes.

One of the first departments which gradually began to expand was the office services section which includes central transcribing, duplicating, microfilming, photocopying, Vari-typing, collating, addressing, etc. This section proved so busy that it had to stockpile its paper and reproduction supplies, some of which are necessitated by thousands of business and report forms required by the government. As these stockpiles increased they outgrew their limited areas on shelves and cabinets into the hallways. This outpouring was contained by removing and relocating the steel partitions.

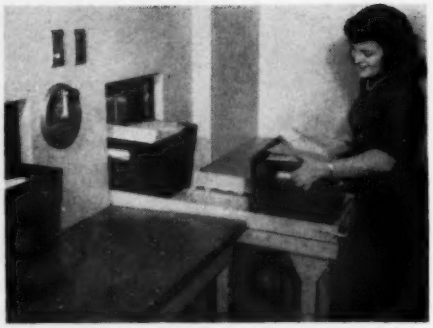
The noise of typewriters, duplicators and other mechanical devices has been minimized by equipping the entire office area of the 13th floor's office services section with acoustical ceilings overhead and resilient, sound-absorbent Vinatread floor covering underfoot. In addition to helping to eliminate sounds, this plastic-top and rubber-base flooring lets the shoe mold itself into the flooring and is restful to employees who stand while they operate duplicating machines. Restful Muzak music pours softly through loudspeakers to mingle with machine noises in the transcribing section where dictation from company and division office executives is transcribed.

Like several other departments, public relations which was in the Law and Finance Building was isolated and while it did its own reproduction work there was a problem of fast distribution to other departments. Among its publications, the p.r. group prepared, reproduced and distributed (by messenger) copies of a "Newsletter" circulated among about 400 executives in the com-

pany offices throughout ten different buildings. As this was spot news requiring immediate delivery there was necessarily some delay due to the many locations to which it was delivered. Now, with all offices in the same building much quicker deliveries are possible.

Delivering mail in this new building is like a sweet dream compared with the former nightmare of routing inter-office memos, messages and supplies among scattered offices. All this, and the unnecessary duplication of personnel in small scattered mail forces, is gone. Now it's all a simple matter of one building, one efficient mail system. This operation is based on an electric conveyor system similar to that used by Mutual Life Insurance Co. of New York (THE OFFICE May, 1952) and Lever House (THE OFFICE December, 1952).

The conveyor carries mail, memos, telegrams and other messages. It also serves to transport library books and office supplies. The system operates throughout the building. A central mailroom, handles as much mail as a public post office in a town of 16,000 population. After sorting, mail is carried in black plastic baskets that nestle in the arms of the continuous chain conveyor which forms a long loop inside the building core. Sub-station mailrooms have small windows through which the automatically operated fingers either push out a mail basket or embrace it and carry it to its proper floor—be it another sub-station or the main mailroom. Controls are regulated by a dial at each dispatching sub-station. Mail girls pick up and dispatch mail at the sub-stations on each floor. The mail is delivered and collected by the mail messengers with



A sub-station on the mail conveyor.

Mailroom in the new Pittsburgh office building of United States Steel Corp.

A MARK OF PROGRESS BY

R.C.Allen

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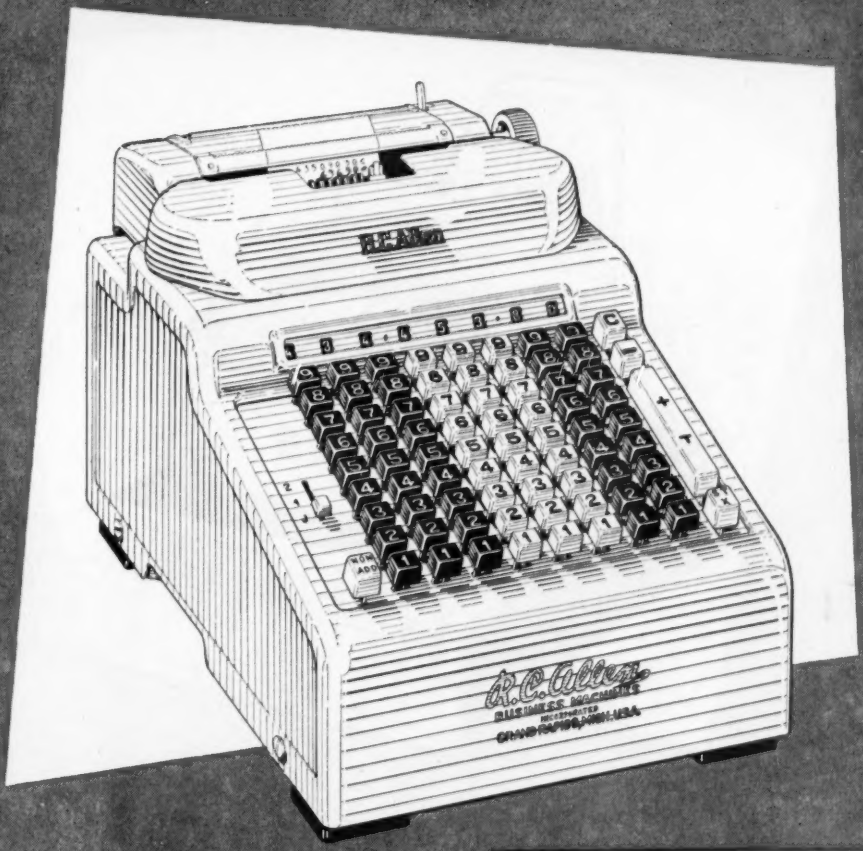

R. C. ALLEN Adding Machines, like Model 815 illustrated, *deliver* a greater measure of service, are unmatched for speed, ease of operation.

Sizes range to 13-column capacity in electric and hand-operated models. Will add, subtract, multiply, divide. Each R. C. Allen model is an outstanding value, built in the tradition of unrivalled quality.

For low cost and high utility, see Model 65; capacity 9,999.99 with direct subtraction. Only $135.00

The R. C. Allen line also includes a ...

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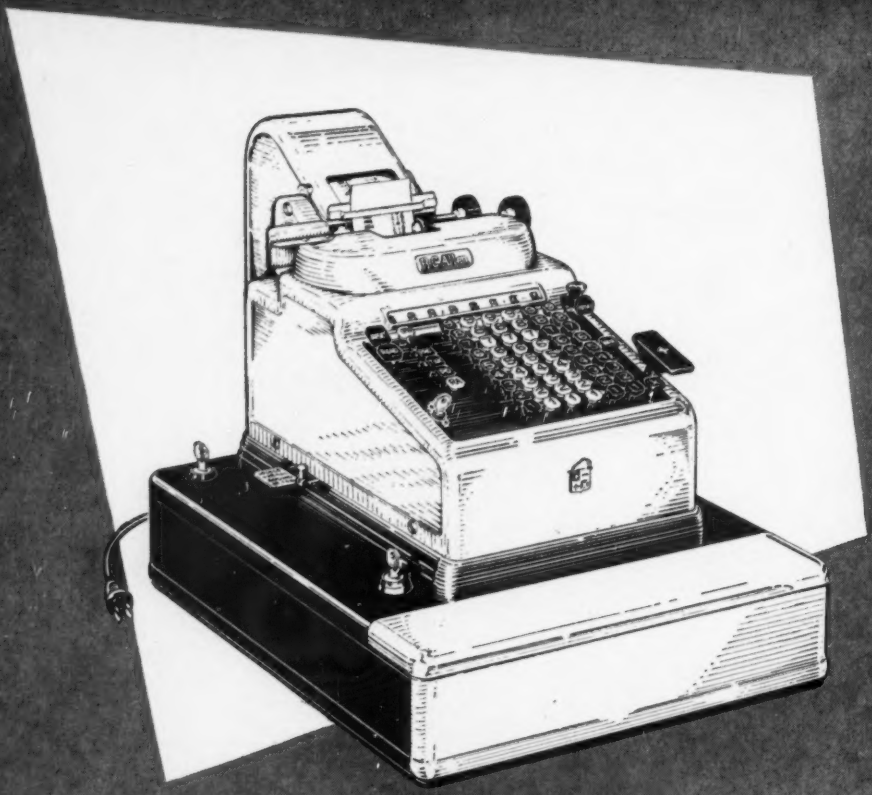
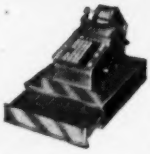
R.C.Allen



16 models offer cash registers for every business. No matter what the business — an R. C. Allen model is ideally suited to the need.

All do double duty, combining cash register functions and adding machine utility. Model 355 illustrated, is a versatile, multiple-total check-out unit.

One of the most popular models is all-purpose Model 100-D, with 9,999.99 capacity and many features usually found only in much higher priced machines. Costs only $195.00.



. . . wide array of specialized cash registers

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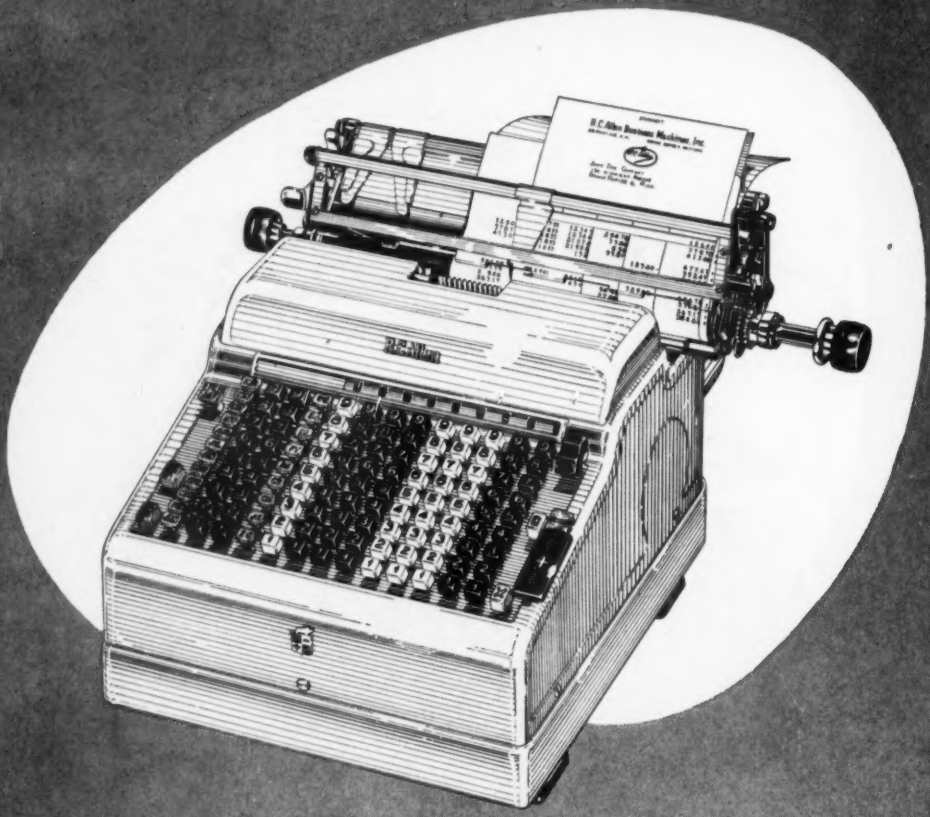
For a standard office typewriter at the lowest price in history, see the "R. C." Model. Nothing omitted, this is a *complete* standard typewriter, but costs only $140.00 plus tax.

R. C. Allen has made history with the introduction of a new standard of the industry, the beautiful VIS-O-MATIC with 38 points of superiority.

Margins are both *visible* and *automatic.* Exclusive 10-second "Quick-Switch" platen provides "specialized" typing. Yet it costs no more than ordinary standard typewriters.

...two outstanding typewriter values...and...

BOOKKEEPING MACHINES BY **R.C.Allen**



R. C. Allen bookkeeping machines, like all the other R. C. Allen office machines, are designed and built to give utmost service, maximum dependability, at lowest cost.

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679 Front Ave., N.W., Grand Rapids, Mich.

... a superb line of bookkeeping machines

The cart, of course, is stainless steel.

stainless steel handcarts.

Telegrams are dispatched from the 40th floor. Telephone switchboards are on the 41st floor. The company has leased direct telephone lines from what is said to be among the largest private branch exchanges in the world: the switchboard has 240 local trunk lines and 137 private lines linked to more than 100 U.S. Steel offices and plants in 32 cities in 12 states. Add about 2,000 dial station lines used daily, all handled by 26 operators who expedite some 350,000 calls a month, or almost 4,500,000 calls annually. This centralized operation adds to office efficiency, although outside public lines are used when private lines are tied up.

A telephone dictation center for telegrams is an arm's length away from the telegraph center. Executives and other office workers in all parts of the building can telephone telegrams and other messages to the telephone dictation center where these messages are received by a pool of typists. They hand the typed messages, through a small window, to the telegraph center which shares a common wall. In the telegraph center, the messages are routed through U.S. Steel's private wire system leased from Western Union. The 525 William Penn Place building is one of their four main message centers which include New York, Cleveland and Chicago. About 3,500 messages are sent and another 7,000 are relayed daily by the Pittsburgh office. All told, the company has 35,000 miles of leased wires which unite 152 stations in 85 cities and towns.

The stockroom on the 14th floor contains thousands of feet of adjustable steel shelving, with clean, accessible space for office supplies. This eliminates storage space in individual offices. Small supply orders can be carried throughout the building on the mailroom mechanical conveyor. Bulk supplies are delivered to the building from the street down a basement ramp, with facilities available for unloading six trucks at one time. An electrically operated turntable enables trucks to move in and out with a minimum of congestion.

An aisle in the 14th-floor stockroom.

Southern California Business Show Week April 19-23

"TO Help You Better Your Score in '54!" is the theme chosen by the Los Angeles Chapter of the National Assn. of Cost Accountants for its 7th Annual Southern California Business Show at the Biltmore Hotel, Los Angeles, April 20-23. A record-breaking attendance exceeding 30,000 is expected.

Business has made a great contribution to the growth and prosperity of Southern California, as well as to the rest of the country, and NACA's annual business show has been instrumental in displaying business' march of progress to thousands each year. The show will be honored this year by a proclamation by Los Angeles' Mayor Norris Poulson establishing April 19-24 as Business Show Week.

In their business methods exposition,

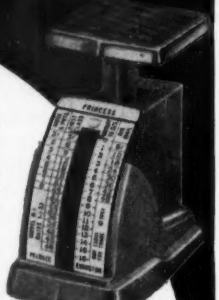
Frank A. Lowe, General Chairman, and Jackie Blanchard, Queen of the 1954 Southern California Business Show.

NACA displays will range from letter folders to electronic brains—equipment valued at $3,000,000 will be on exhibit. Over 40 different companies will be demonstrating 1,500 different types of

How to reduce *MAILING COSTS* in *YOUR* office!

Z-2 and Z-5 5½" high —2 lb. and 5 lb. by ½ oz. —for all classes including Parcel Post

If your office isn't a "one typewriter" office, it shouldn't be a "one scale" office either, or your mailing costs will be too high. To save loss of time (and money), confusion, return of mail for lack of adequate postage, place one of these attractive, convenient Pelouze Postal Scales on the desk of every secretary. Use the right scale for the right purpose—the new one pound accurate N-1 PRINCESS showing exact postage for first class and air mail; the durable, dependable Z-2 in either 2 lb. or 5 lb. capacity with dial showing exact weights for all classes of mail including parcel post by zones—larger A-Line Scales with capacities up to 50 lbs., for shipping rooms.



N-1 Princess only 4" high 1 lb. by 1 oz. $2.95 list

To stop office confusion, errors and rushing around at mail time, order several of these accurate, low cost Pelouze Postal Scales today.

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Marvel Mail Opener

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is the all too frequent complaint
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The Marvel is so easy to use, costly clerical help spend only a fraction of the time required to sort and open envelopes by hand. It's completely safe too . . . ends danger of torn enclosures or ripped checks.

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Los Angeles' Mayor Norris Poulson (left) reads his Business Show Week proclamation to Show Queen Jackie Blanchard and Show Chairman Frank Lowe.

office machinery.

"For the seventh consecutive year, businessmen will be able to see under one roof, the newest and latest applications and developments in the fields of office machines, equipment and methods, with primary emphasis on increasing efficiency, improving service and decreasing costs," stated the show's chairman, Frank Lowe, to indicate the basic purposes of the annual exhibit. All previous records for exhibit space reservations have been broken for this year's show. The array of exhibits and demonstrations has a particular appeal not only to business executives but to the vast army of clerical employees. All are invited to attend.

LIST OF EXHIBITORS

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Commercial Controls Corp.
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- Just 15 seconds from original to exact copy—dry process all the way!
- Eliminates chemicals, masters, and special negatives—a clean, neat job every time!
- Simple and easy to use—even inexperienced workers turn out top-quality copies!
- Copies 40 times faster than the fastest typist! Ideal for general office copying work.

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5 times more work every month

Your secretary — or anyone in your office — can work 5—10 times faster with Facit, the fully automatic Swedish calculator. Thanks to its revolutionary, easy-to-learn 10-key system she can solve any calculating problem in one fifth the ordinary calculating time. She's getting 5 times more work done every month! And she can operate Facit with one hand, leaving the other free for notations, checking etc.

All the figures on your five fingers

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CALCULATOR

World's most exported calculator

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National Conference & Exhibit Calendar

Southern California Business Show, Biltmore Hotel, Los Angeles, April 20-23.

Railway Systems & Procedures Assn., Morrison Hotel, Chicago, April 20-22.

Insurance Accounting & Statistical Assn., Dallas, May 3-5.

National Office Furniture Assn., Sherman Hotel, Chicago, May 8-11.

National Assn. of Credit Men, San Francisco, May 16-20.

New York Stationery Show, New Yorker Hotel, New York, May 16-21.

National Office Management Assn., Jefferson Hotel, St. Louis, May 23-27.

NRDGA Controllers Congress, Ahwahnee Hotel, Yosemite National Park, Calif., May 24-27.

National Office Machine Dealers Assn., Chase-Park Plaza Hotel, St. Louis, June 20-23.

National Secretaries Assn., Waldorf Astoria Hotel, New York, July 21-24.

(Continued on page 23)

"She's the plain, sensible, homey type"

Planned Efficiency with* PLANOMATIC *Combats Rising Costs

Make every square foot count the quick accurate way with Planomatic.

Planomatic's three dimension magnetized scale models provide a picture in miniature of your office layout problem.

Every detail can be worked out without drawing a single line because plans are recorded by photographing or direct blue printing.

Make your next move the PLANOMATIC way.

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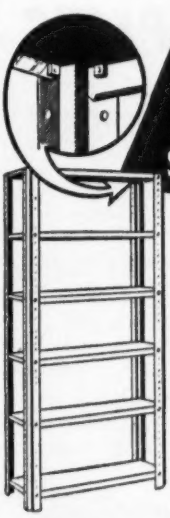

NEUBAUER "TWIN-POST"

adjustable **STEEL SHELVING**

with new, rigid "Twin-Post" corners

Here's the one shelving that has both the strength and fine appearance for most of your office, storeroom and warehouse shelving needs. 16 gauge "Twin-Post" corners are actually 2 posts with 3 strong corners . . . shelves fit tightly, everything stays in line. Finish is smooth baked-on Airline Grey or Olive Green enamel. 18 or 20 gauge shelves available in a wide range of sizes.

See your office supply dealer or write us for specifications.

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STAPLING STOPS LOSS

of valuable papers

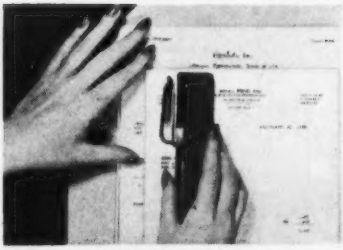
BOSTITCH B8R DESK STAPLERS keep your important related papers fastened securely together until you want to whisk them apart with the attached staple remover. Unrelated papers cannot slip under the staple—as does happen with clips, sometimes—and get lost in the wrong file.

The stapled papers are easier to file—don't bulk up your file folders—increase file capacity.

B8R is of recognized Bostitch quality, will give you years and years of dependable use. Flick off the base and you have a handy stapling plier or a tacker—for many added uses.

HOW SAFE ARE YOUR PAPERS?

Make sure . . . with a Bostitch stapler on every desk. B8R's low price makes this a good investment. Order through your stationer . . . or phone Bostitch.



HANDY REMOVER is attached. Easy to use, fast, neat. A Bostitch exclusive.

FASTEN IT BETTER AND FASTER WITH

BOSTITCH

STAPLERS AND STAPLES

(Continued from page 21)

National Stationery & Office Equipment Assn., Conrad Hilton Hotel, Chicago Sept. 18-22.

National Business Forms Associates, Broadmoor Hotel, Colorado Springs, Colo., Sept. 25-29.

Life, Office Management Assn., Shoreham Hotel, Washington, D. C., Sept. 27-29.

National Business Show, 69th and 71st Regiment Armories, New York, Sept. 27-Oct. 1.

Controllers Institute, Edgewater Beach Hotel, Chicago, Oct. 10-13.

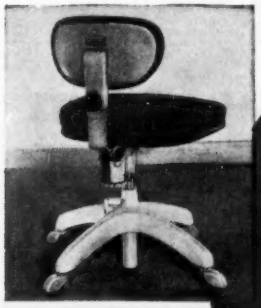
National Institute of Governmental Purchasing, Statler Hotel, New York, Oct. 10-13.

American Bankers Assn., Atlantic City, N. J., Oct. 17-20.

National Assn. of Bank Auditors & Controllers. Fairmont Hotel, San Francisco, Oct. 17-21.

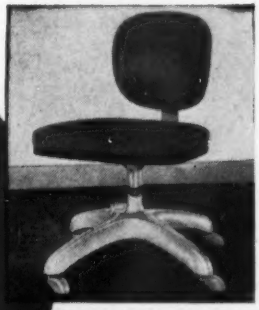
Systems Workshop

Systems people are offered the free use of complete drafting, reproduction and duplicating equipment, so that they can develop their own ideas of forms design, in a systems workshop which has been set up by Mercury Printing Co. in New York. Anyone can make use of these facilities without obligation, sales pressure or other interference. There are trained personnel available for assistance, if desired and without cost to the user.



Model A-22-HM-T

Popular stenographic, sho ing two optional features, th "Dial-A-Tilt" and "Hite-Master" controls.



Model A-33

Clerical chair, with large seat and back for masculine comfort.

Model A-334-TB

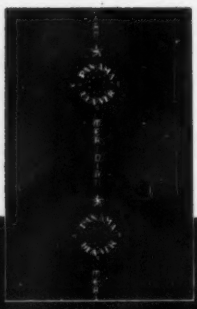
One of several types of arm models in this series. Shown with optional "Dial-A-Tilt".

ALUMIN-EASE Cramer

POSTURE CHAIR CO., Inc. 1205 Charlotte — Kansas C

The tale is told of three laborers who, when asked what they were doing, replied as follows: — The first grumbled that he was working for six shillings a day. . . The second grunted that he was toting bricks to his dad on yonder ledge . . . The third, with pride in his voice and stars in his eyes, said *"I, sir, am helping to build a cathedral!"*

Pride of workmanship! How vitally this unseen factor contributes to the enduring excellence of PANAMA-BEAVER Ribbons and Carbons! Brilliantly originated, meticulously planned, scientifically manufactured with built-in Will to Serve —such precious products could never reflect the obvious defects of mass-production — because we, too, are *"helping to build a cathedral."*



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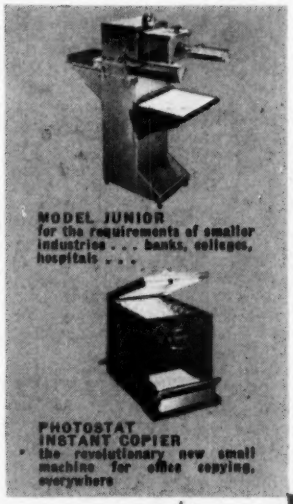

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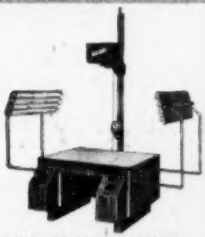

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the finest of its kind . . . made by MICROTRONICS CORPORATION and exclusively sold and serviced by PHOTOSTAT CORPORATION

For over 40 years, PHOTOSTAT CORPORATION has manufactured, sold and serviced the finest of photographic copying equipment and supplies. They have been continuing years of successful service to American business and the varied requirements of Federal, State, County and Municipal governments, coast to coast.

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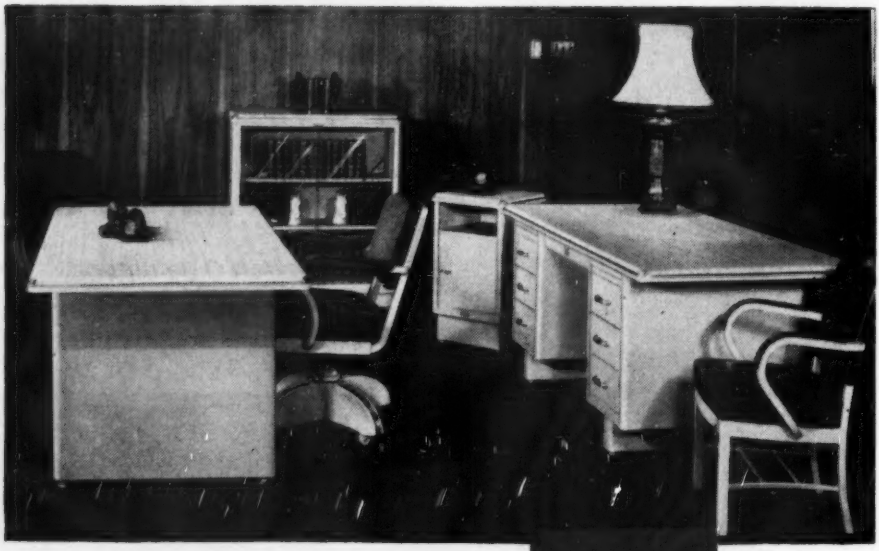
Invincible Modernaire Suites



put your executives "up front"

Suites or singles . . . Invincible is 3 ways better for private offices!

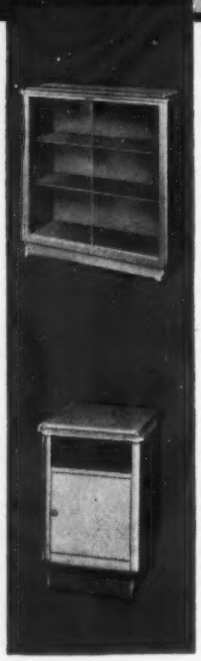
Excitingly beautiful . . . any executive will appreciate the handsome, prestige-building design — the warm, yet business-like appearance of his Invincible-equipped office.

Amazingly efficient . . . Countless work-saving convenience features give you better morale, greater output from your key men.

Outstandingly economical . . . Top quality materials and super-rugged construction assure you enduring beauty and uninterrupted service. Whether you're planning new executive offices or just remodeling, insist on Invincible . . . the line that's designed for better business living. See your Invincible dealer today!

INVINCIBLE

Invincible Metal Furniture Co. • Manitowoc, Wis.



New!

Modernaire Bookcase.

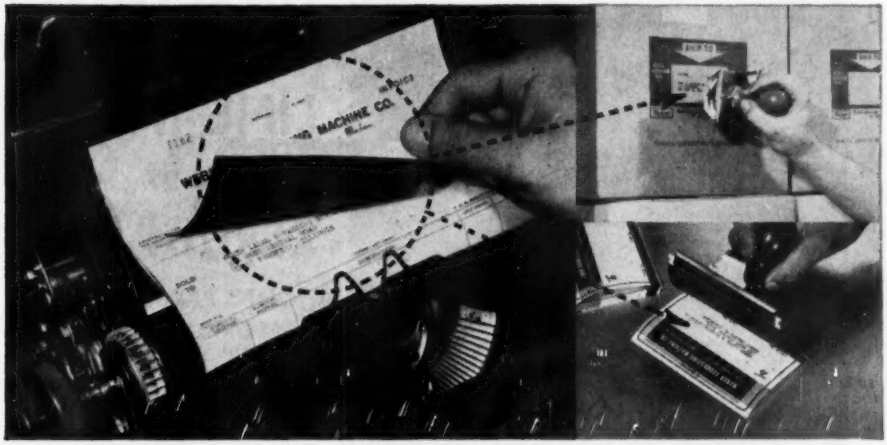
Top is linoleum covered to match desks. Two adjustable shelves are furnished. Available with or without glass sliding doors.

New!

Modernaire Telephone Stand.

Linoleum top matches desk. Adjustable, non-rust glides on base can be set to level stand . . . eliminate rocking and vibrating.

NOW... SHIPPING PAPERWORK SIMPLIFIED TO CUT COSTS

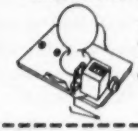


New WEBER TAB-ON STENCIL is typed with forms, then used to address labels, tags, and direct-to-containers

Before your product can be shipped, paperwork must be made out and containers addressed. Here's a system that will help you do both in less time, with less labor.

Typist sticks Tab-On Stencil to bill-of-lading or invoice form over the "Ship To" area. In one typing the forms and stencil are prepared with the ship-to address. Then the Tab-On Stencil is sent with the shipping copy to the shipping department where it is clipped over the pad of an RJ-1 Hand Printer. After operator addresses the necessary labels, tags, or containers at the rate of 40 to 50 per minute, he destroys the stencil. Final result: typing time saved, shipping errors eliminated, costs cut.

FINEST HAND PRINTER IN USE TODAY—WEBER RJ-1



Fast, clean. Reservoir holds enough ink for 7,500-10,000 prints. Can be supplied with one or two counters for count control.

another

Weber

system

WEBER LABEL AND MARKING SYSTEMS
Div.—Weber Addressing Machine Co.
Mount Prospect, Illinois

MAIL FOR FOLDER ON TAB-ON SYSTEM & RJ-1 HAND PRINTER

Company_____
Individual_____
Title_____
Address_____
City_____ Zone____ State____

WEBER LABEL AND MARKING SYSTEMS
Dept. O-4, Mt. Prospect, Illinois

NOW you can copy HALFTONES as well as LINE WORK by XEROGRAPHY

ONTO PAPER MASTERS FOR DUPLICATING

Photo at left shows paper master of line and halftone subject prepared by xerography in XeroX® Lith-Master copying equipment with new XeroX Tone Tray. Copies run off on offset duplicator from paper master are also shown.*

Use of the new Tone Tray in preparing *offset paper masters* offers a quick way of providing a few, or many copies of catalog sheets, price lists, bulletins, magazine articles at costs considerably less than conventional methods.

Xerography is used by companies of all kinds large and small in thousands of applications copying forms, letters, charts, bulletins, sales manuals, engineering drawings, price lists, etc., for duplicating. Anything written, typed, printed or drawn can be copied on to paper masters by xerography with XeroX® Lith-Master* copying equipment.

Write for complete information on what xerography can do to cut your duplicating costs.

*A TRADEMARK OF THE HALOID COMPANY

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XEROGRAPHY

The fastest, cheapest, most versatile way to make masters for duplicating

Machine that loves to fold... faster... better... cheaper!

Any office, no matter how small, can eliminate costly hand folding with this compact, low-cost office folding machine. The Pitney-Bowes FH model gives you the speed and economy of machine folding. Little larger than a typewriter, it actually costs *less!*

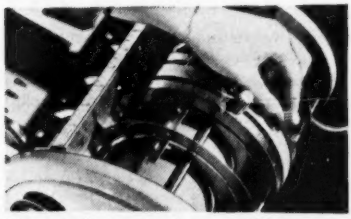
Anyone in any office can easily operate this folder. It can be set for a job as quickly as you can tune your TV. Merely adjust two indicator knobs. With semi-automatic feed, and electrically driven, it is accurate and fast—can double-fold up to 5,000 pieces per hour.

It can make eight different folds, handling paper sizes from 3 x 3 up to 8½ x 14 inches. And it can single-fold or double-fold sheets when stapled together.

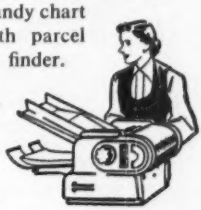
The FH costs less than a standard typewriter

Light in weight, it can easily be moved around where there is anything to fold—in office, shop or factory.

Call or write your nearest PB office for a free demonstration—or illustrated booklet—or a free handy chart of postal rates with parcel post map and zone finder.



Move *indicator knobs to widths wanted ...And it's ready to go!*



Fully automatic Model FM folds up to 19,000 sheets per hour.

PITNEY-BOWES
Folding Machines

Made by Pitney-Bowes, Inc....originators of the postage meter...93 branch offices, with service in 199 cities in U.S. and Canada.

PITNEY-BOWES, INC.
3447 Pacific St., Stamford, Conn.
Send free booklet on Folding Machine to:

Name_____

Address_____

Ham on Rye or Rye on Hand?

Count BOTH

(and 1,001 Other Items)

with this New Veeder-Root

VARY-TALLY

Multiple-Unit Reset Counter

Knowing how many apple versus lemon pies, for instance, are ordered on a given day . . . or how many cases of what are in the cellar . . . helps a restaurant *count*rol, make plans, make profits. The same goes for a manufacturer or wholesaler seeking tighter inventory control . . . or for any of the following:

- Traffic Engineers
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- Nurserymen and Florists
- State Park and Forest Services
- Laboratories
- Milk Plants and Ice Cream Processors
- Researchers
- Industrial Plants
- Textile Mills
- Inspection and Quality Control
- Jobbers, Wholesalers, Distributors
- Restaurants and Hotels
- Mail and Phone Order Departments
- Laundries and Linen Supply Houses
- Manufacturers of equipment for:
  - Order Control
  - Stock Control
  - Inventory Control
  - Traffic Control
  - Sales and Market Analysis
  - Laboratory Analysis
  - Payroll Preparation
- and What Do You Want to Count?

Arranged compactly on stands in tiers, the Vary-Tally can be supplied in any of 66 combinations, up to 6 banks high and 12 units wide, with a minimum of 2 units wide. Write for new sheet and prices.

"The Name that Counts"

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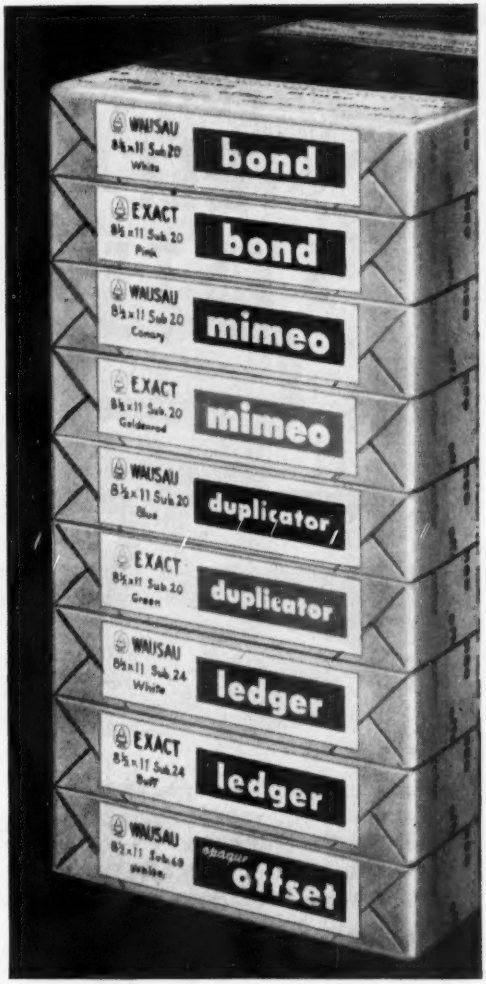
To get and make the BEST IMPRESSIONS use WAUSAU IMPRESSION PAPERS



Make a better impression using WAUSAU fine Impression Papers. The complete line is specifically designed to get the best impressions, whether you use offset, stencil duplicating, spirit or gelatin process.

WAUSAU BOND, WAUSAU MIMEO, WAUSAU DUPLICATOR and WAUSAU LEDGER are genuinely watermarked papers. EXACT BOND, EXACT MIMEO, EXACT DUPLICATOR, EXACT LEDGER and WAUSAU OPAQUE OFFSET are not watermarked but are made to get excellent quality impressions.

Ask your dealer for samples of WAUSAU IMPRESSION PAPERS best suited to your machines. Then test them. You'll see for yourself that you get and make the best impressions using WAUSAU IMPRESSION PAPERS.

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The complete line is available nationally through authorized distributors and stationers.

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Smead's TELL-I-VISION SYSTEM files 5 ways

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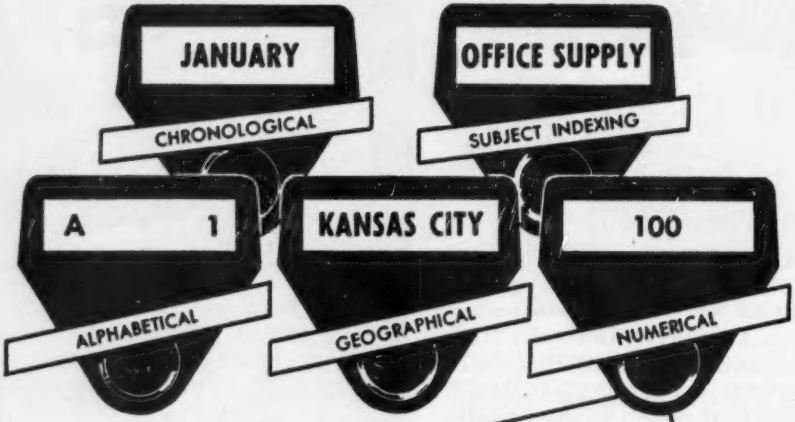

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Reads like a book, from left to right.
Grows as needed.

THE Smead MANUFACTURING CO., INC. HASTINGS, MINNESOTA

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KEE LOX "KOPY ALIGNER" combines HIGHEST QUALITY CARBON PAPER

Plus Patented Collating Feature, Insures Speed Automatically, Plus Efficiency, with Less Fatigue.

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YOU SAVE ON THE TIME

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Kee Lox Duplicator Supplies are No. 1 on the market.

Just phone our Branch in your city for Samples of above Kopy Aligner or write to

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Above line for Export, write to Export Dept. above address, for information, free Samples and Exclusive Territory. Most complete and Highest Quality Line in the Industry. Quality that holds Customers and insures Profit. We know because we sell it retail. You get the same product.

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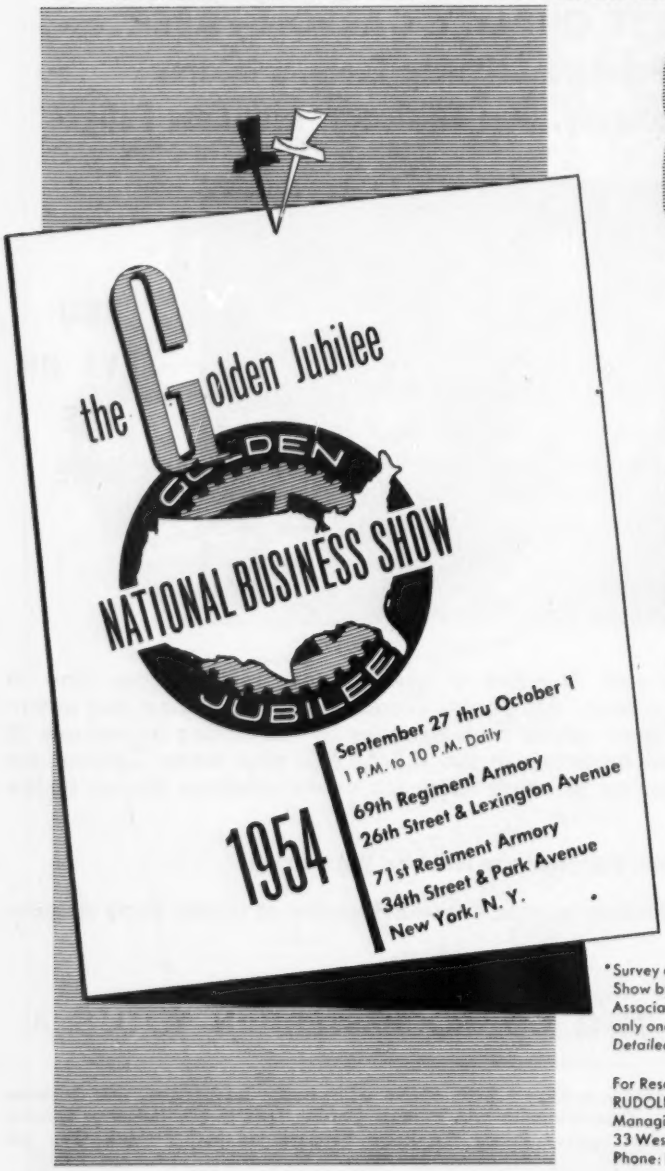

87%

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THEIR OFFICES ARE NOT COMPLETELY EQUIPPED FOR MAXIMUM COMFORT AND PRODUCTION*

*Survey of 1953 National Business Show by John T. Fosdick Associates. 98,031 attended for only one purpose — to fill their needs. *Detailed Show Report on request.*

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Electric models equipped with universal motors, adjustable for all voltages and frequencies.

Minimum of mechanical service.

Latest development:

hamann 300

with simplified key-board.

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2118 LAND TITLE BUILDING, PHILADELPHIA 10, PA.

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invites you to a special display.

5 NEW MODELS

OPENING AN ENTIRELY NEW MARKET FOR THE "LIVE DEALER."

DEALERSHIPS INVITED THROUGHOUT ALL STATES.

LIBERAL TERMS AVAILABLE TO APPROVED DEALERS

DO NOT MISS THIS OPPORTUNITY

UNIVERSAL CASH REGISTERS

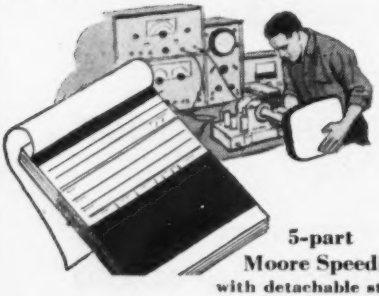
95-99 MANSFIELD ROAD, NOTTINGHAM, ENGLAND

"Let's talk systems"

Orderly planning helps produce a good system. And if 3 writings can be combined into 1, or 16 parts reduced to 8 (with results the same or better), the system becomes more efficient, and economical. The Moore man has helped develop many good systems and through wide experience may be able to offer suggestions that will bring improvements like these.

EXAMPLE:

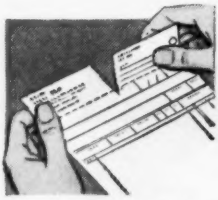
REPAIR ORDER INVOICE



5-part Moore Speediset with detachable stubs

The Problem: An appliance repair business grew from a one-man shop to a quarter-million volume. An office system that wouldn't grow with it made the operation hard to manage. A repair job took 6 separate forms, a total of 16 parts including duplicate call-notice book, 3-voucher appliance tag, repair estimate form, permanent file card, 3-part delivery slip, 3-part book form; and miscellaneous other forms. There was confusion and no control; effort but no order; rewriting but no checking.

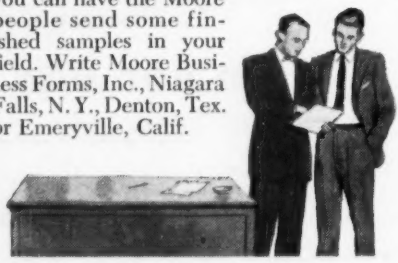
The System: *A 5-part Moore Speediset.* Part #1 (Call Notice) stays in the book as a record of repair calls. Part #2 (Sign & Return) directs the serviceman to customer's address. Later it doubles as a delivery slip and is used for accounting. Part #3 is given to customer as record or as receipt. Part #4 serves as an estimate form, then as work order. From Part #5 is torn off a merchandise tag that identifies the appliance in route. Customer's claim check is also attached to Part #5. The rest of the form is used for control of moneys, then as record.

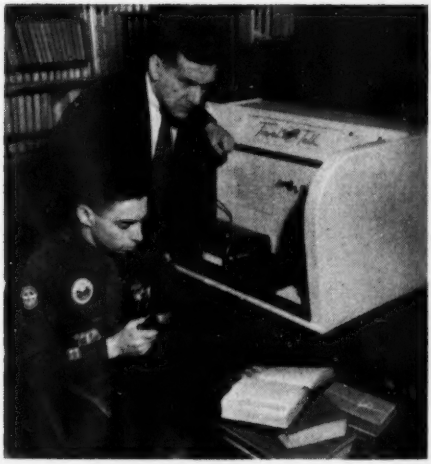


Savings and Gains: One form takes the place of 6. Bound construction leaves one sheet in the book as permanent record. After removal of most copies as unit, a bottom stub holds together these parts. Better control is provided with the same number printed on each form. Errors are eliminated because no information has to be transcribed. It has resulted in lower clerical costs and improved customer service.

• • •

New applications are always being worked out, and chances are pretty good they can be accommodated somewhere along the line to pack more efficiency into a system you may be planning. The Moore man is often a good man to have around at a time like this. To get an idea of the kind of progress being made from day to day, you can have the Moore people send some finished samples in your field. Write Moore Business Forms, Inc., Niagara Falls, N. Y., Denton, Tex. or Emeryville, Calif.





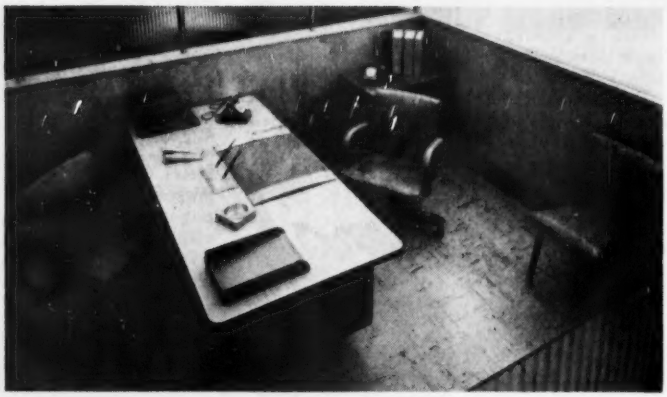
Eagle Scout Gus Davis and Edward G. Freehafer, chief of the New York Public Library's research department, using the library's coin operated dictating booth which is equipped with a Dictaphone Time-Master which allows readers to dictate their notes.

Sophie Harris using a Copease Duplex photocopier in the office of Otis Elevator Co., New York. Curtain is drawn only when a microfilm enlarger is exposing Copyrapid paper which is developed in the Duplex machine. Regular photocopies are made with lights on.

Camera!

Newly decorated office of Bruce D. Henderson, vice president in charge of purchases and traffic, Westinghouse Electric Corp., Pittsburgh, showing draperies of Owens-Corning Fiberglas fabric.

A Stenofax machine, made by Times Facsimile Corp., is used to make offset masters in the duplicating department of Dun & Bradstreet, Inc., New York.

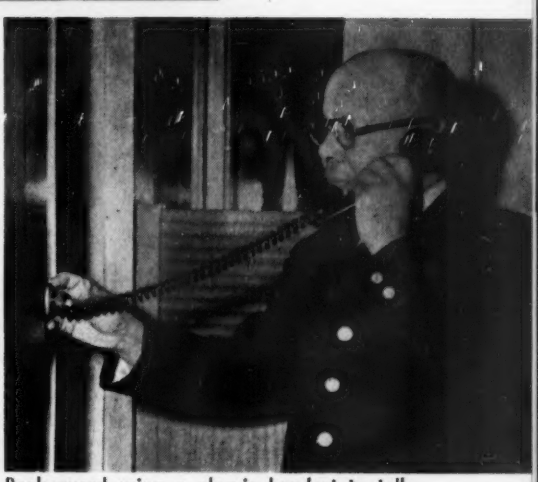


One of the executives offices of Dormeyer Corp., Chicago, showing upholstered chairs made by Royal Metal Mfg. Co. and desk by All-Steel Equipment, Inc.

Victor Custom Adding Machines in the payroll department of Ford Motor Company's River Rouge plant.

Key room in the sub-basement of Rockefeller Center, New York. Oscar Gutierrez (left) is using a P. O. Moore key drawer file while Charles Bullock refers to the key index.

Todd Protectograph Checksigner in the office of Albert A. Alles, auditor of disbursements for Stromberg-Carlson Co., Rochester, N. Y.



Bank guard using a plug-in handset to talk to the manager's office. The intercom-phone is made by Wheeler Insulated Wire Co.

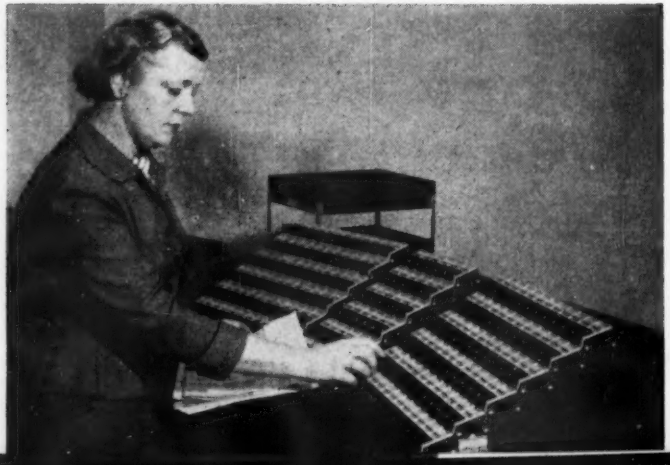
Insulated Rol-Dex Files, made by Watson Mfg. Co., are used for five different applications by the First National Bank, McKeesport, Pa. Note the rolling chair-desk units with telephone connections, at rear left.

The Norristown (Pa.) Time Herald uses a Lamson Airtube system between the office and composing room. Trip takes less than 4 seconds for copy, proofs, etc.

♦ Sixty sound-conditioned Telepax phone booths, made by Deutsche Telephonwerke & Kabelindustrie, were installed by the Berliner Post for reporters at the Four-Power-Conference in Berlin in February.

Edwin H. Mosler Jr. (left), president, Mosler Safe Co., explains a scale model of the 50-ton safe made for the Declaration of Independence and the Constitution in the National Archives Building, Washington, D. C. ♦

A 180-unit Veeder-Root Vary-Tally is used by a wholesaler of table linens to tabulate orders by half-dozens. User estimates a time saving of 35% over hand posting.



An installation of Plus Rapid Adders and Plus Adding-Calculating machines in the offices of R. L. Polk Co. in Cincinnati.

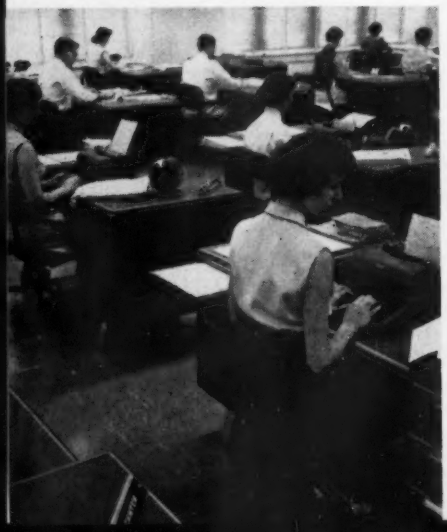
Evans Gathering Racks and Jogger are used to assemble 600,000 mailings a month at Southern States Cooperative, Richmond, Va. Kenneth R. Eckles, treasurer, stated they have used Evans Gathering Racks for about ten years.

This installation of Milwaukee Metal Chairs was made by Wagner, Henzy, Fisher Co. in the Police Building at Parma, Ohio.

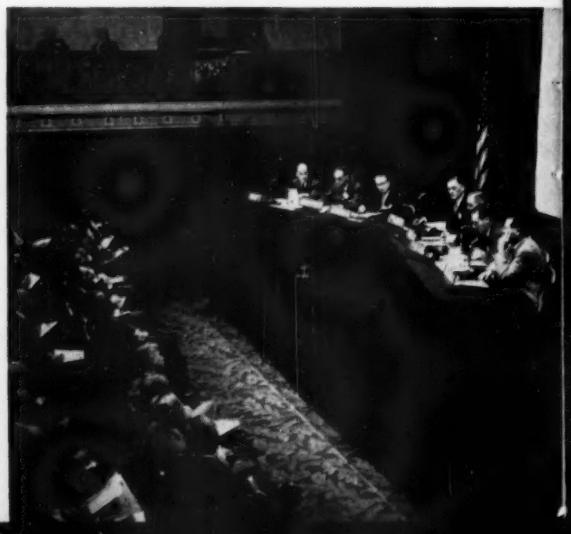
Although their products have risen from 6,000 to 10,000 in the last three years, three Remington Rand Robot Kardex files and the same number of clerks maintain inventory control for Will Ross, Inc., Milwaukee.

A standard Halda Typewriter and a Facit Calculator gave perfect service for the 27 months they were used by British-Norwegian - Swedish scientists at the South Pole in 40°-below antarctic dampness with no spare parts or servicing. This window display by Scandinavian Airlines System and Facit, Inc., was shown in New York.

Do-More Posture Chairs are used through the offices of General American Life Insurance Co. in St. Louis.



McBee Co. officers (A. T. Craft, St. Clair Bromfield Jr., Roger Connor, P. M. Zenner, B. F. Cutler, E. H. Gibson and Dan Merrick) described their company's 1954 marketing plans at the annual marketing conference of American Management Assn. in New York.



A Day-Brite Para-Louver installation in the office of Intersol Milling Machine Co., Rockford, Ill.

Office of Allied Discount Co., Philadelphia, showing Sturgis Posture Chairs installed by Samuel Galespie Co.

An Ajax Electric Quick-Set machine prints the number of shares and dividend amount on triplicate forms in one operation at Gude, Winmill & Co., New York.

The savings made on this operation paid for two Apeco Auto-Stat installations at Investors Diversified Services, Minneapolis. Auto-Stats are made by American Photocopy Equipment Co.

A Model 700 portable electric Speedi-Matic Perforator, product of American Bank Equipment Co., cancels invoices in the accounting office of E. I. du Pont de Nemours & Co.

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Please send Vari-Typer Booklet 358.

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COMPANY.....
ADDRESS.....
CITY.....ZONE...STATE....

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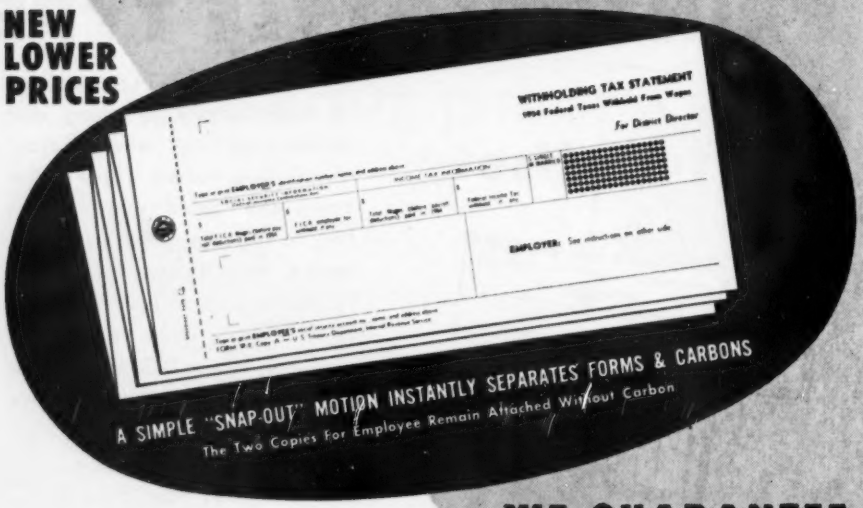
NEW LOWER PRICES



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- **5- and 6-part forms include special copies for various states and cities.**
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That the W-2 Forms which you purchase from us will be acceptable by the Treasury Department until January 31, 1955. If there are any changes in the present tax laws which will necessitate overprinting or supplying new forms — we undertake to overprint, if acceptable by the Treasury Department, or replace if not acceptable WITHOUT CHARGE TO YOU.

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Descriptive Literature on Marchant Calculators . . . . ☐

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03

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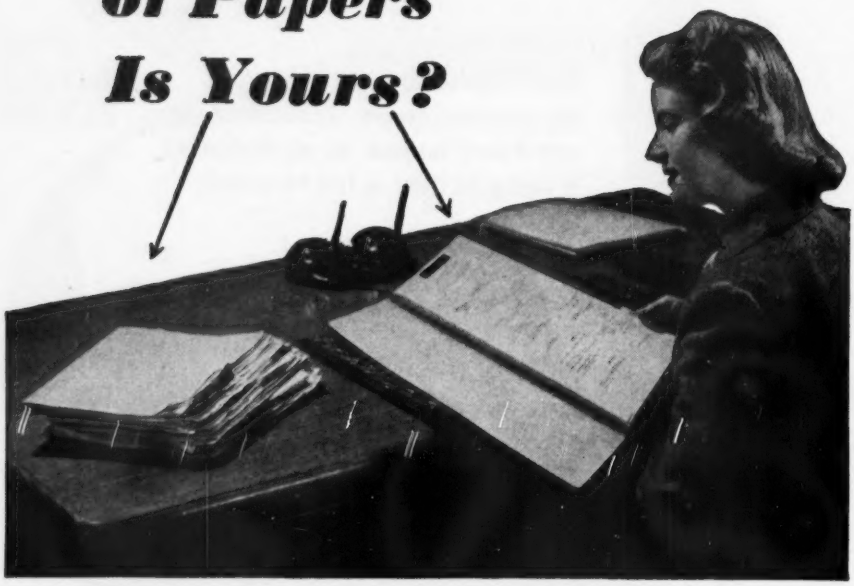

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ACCOBIND FOLDERS

"ACCO-bound Papers are SAFE Papers"

Accobind Folders of fine pressboard incorporate the ACCO Fastener of smooth pliable steel for the all-important safety factor. Each paper, punched and placed over the prongs of the ACCO Fastener, retains its proper place in the folder by date, number, or other required sequence, and is not subject to accidental loss or misplacement.

The unique Accobind transfer feature enables the bound units to be withdrawn from the metallic holding device in the folder, to be placed — ready-indexed — in the transfer file. With a new Indexing Sheet and ACCO Fastener introduced into the slideway of the Accobind Folder, it continues on, year after year, to give you a supremely fine filing-binding service.

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REGNA

CASH REGISTER IS ALSO AN ADDING and BOOKKEEPING MACHINE?

A "Easy View" curved window shows each amount rung up.

B New ribbon printing mechanism provides *single* and *double* cash receipts: one for your customer, one for your records.

C "Greased Lightning" push button operation with keys scientifically designed and numbered for minimum finger and eye fatigue.

D A masterpiece of streamlined design with gleaming enamel finish, chrome plated rust-resistant trim.

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Here at last is the all-purpose machine specifically designed for those small and average-size merchants who comprise the bulk of your *volume market!*
A machine so versatile, so magnificently engineered and designed, it's destined to tally up the biggest sales record in your experience! Exaggeration? Just compare Regna feature for feature, price for price with any other similar machine on the market today. You'll be convinced that with Regna you have the trump card, the shot-in-the-arm your business needs!

Nationally advertised to millions of retailers in every field . . . fully backed with dealer promotional material. *Easy time-payment plan for your customers.*

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REGNA CASH REGISTERS, Inc.
175 Fifth Avenue
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GET ALL THE FACTS ABOUT REGNA
FILL IN COUPON NOW!

Regna Cash Registers, Inc.
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Company_____
Address_____
City_____ Zone____ State____

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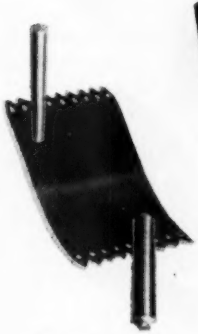

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NEW Books

ECONOMICS AND TECHNIQUES OF MOTION AND TIME STUDY by J. P. Lesperance. Wm. C. Brown Co., Dubuque, Iowa, pp. 258, $4.25.

The economics of motion and time study including the significance of business ratios and the break-even point. The technique is described and illustrated in a 6-Step Motion Study Master Plan of which the last step is designed to help the analyst sell top management with a profitgraph. Prof. Lesperance, who directs the motion and time study laboratory at the University of Miami, has not overlooked the importance of the human element in motion economy. Also included are the instruments and forms used in this work.

THE WOMEN'S MEMORY JOGGER. National Foremen's Institute, New London, Conn., pp. 48, $3.75 a year.

Handbag-size booklet with pages for a month's daily memos, pages for expense records, names, addresses, phone numbers, plus text on a variety of interesting and useful subjects for women like a weight chart and calorie counter. Published monthly and a removable plastic cover is provided with each subscription. Cost is lower for five or more subscriptions going to one company for distribution to employees. A free sample copy may be had.

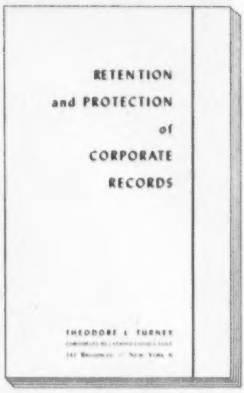
A FORMS MANUAL by Wesley S. Cadmus, Unionville, Conn., pp. 68, $7.50.

A compact but comprehensive illustrative text on forms design which shows how to make savings on forms, design forms, buy forms and how to set up a forms program.

(Continued on page 84)

Costs Can Be Cut Substantially By Re-Appraisal of Your Record Retention Practices

Compare your records retention procedure with the country's 70 leading corporations. Their current schedules, covering 67 principal records, are assembled in this report — now being used by a growing list of firms to evaluate their own programs. Record practices are tabulated by type of record and industry. Price of the complete report: $100.00.



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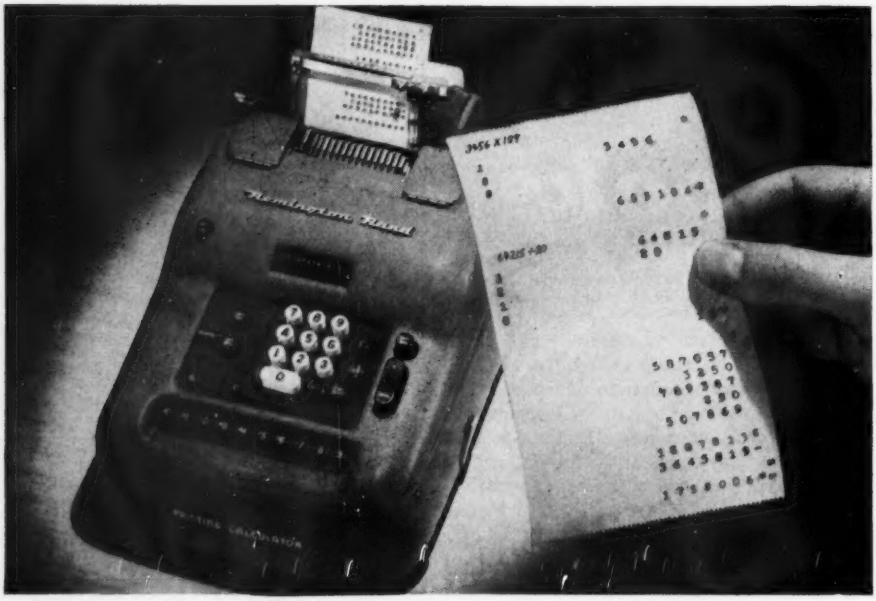

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This new, printing calculator automatically multiplies, divides, adds and subtracts amounts up to ten trillion. It proves and prints every calculation on the tape. It's the *first* fully automatic printing calculator with *all* these features:

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Simpla-tape . . . printed proof in black and red.
10-key touch addition and subtraction . . . for faster, easier operation.
Constant key . . . the exclusive multiplication "memory" feature.
Automatic Total Control . . . for individual or accumulative totals.
2-color ribbon . . . totals, subtotals and credit balances in red.

FREE! Ask your Remington Rand Representative for an eye-opening demonstration, or send for your copy of the "show how" folder (C669) illustrated here. Write Remington Rand, Room 1410, today.

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New York City's Forms Control Program

HERMAN LIMBERG

Coordinator, Citywide Forms Control and Records Management Programs. Division of Analysis, Bureau of the Budget, City of New York.

A MAJOR phase of the management improvement activities of the City of New York is its forms control program. Instituted in October, 1951, the prime objective was to produce greater efficiency and economy in the design, procurement and use of the thousands of printed forms for which an expenditure of approximately $1,500,000 is made annually. A pilot study of 500 forms used by one municipal department was made by the Division of Analysis of the Bureau of the Budget early in 1951. The results of this study indicated a significant potential for improvements and savings which would amply justify a city-wide forms control program.

The program was established under the joint sponsorship and direction of the Bureau of the Budget, the Office of the Controller, and the Department of Purchase. These are the staff agencies which are responsible, respectively, for the administrative management, auditing and inspection, and procurement functions of the municipal government. Administration of the program was centralized in the forms control unit of the Division of Analysis of the Bureau of the Budget.

Objectives of the program, as defined by the sponsoring agencies, were:

1. Control of the design, adoption, procurement and use of forms.
2. Coordination of forms design and control with systems, methods and procedures.
3. Standardization of sizes, papers and other physical aspects of forms.
4. Standardization of forms commonly used by various city agencies.
5. Elimination of unnecessary and obsolete forms.
6. Improvement in the functional efficiency and appearance of forms.
7. Combination or consolidation of different forms performing the same or similar functions.
8. Effectuation of economies possible through proper controls.

The scope of the program included all forms, whether purchased from outside sources or produced on office duplicating equipment. It also included tabulating cards, printed duplicating masters, checks, tags, placards, blank books, form letters, letterheads, envelopes, ruled and columnar or analysis paper.

The central forms control unit, in the Division of Analysis of the Budget Bureau, is responsible for city-wide coordination of the program, conducting research, developing standards, and training and counseling departmental forms representatives. The latter, designated by their department heads, are

Form No.	Title	Functional Class

Purpose of Form	Used By	Department	Bureau	Division

No. of Copies Prepared	Method of Preparation	Type ☐ Hand ☐ Other	Annual Consumption	Retention Period	Active _____ Years Inactive _____ Years

PHYSICAL ASPECTS OF FORM AND COST FACTORS

Date Ordered	Quantity	Size	Paper				Comp.	Press	Ruling	Binding	Misc.	Total Cost	
			Color	Grade	Sub. Wt.	Cost							

RECORD OF FORM REVISION

Date	Revision	Reason For Change	Savings

NYC 11-51 FORM ANALYSIS RECORD — THE CITY OF NEW YORK

New York City uses this form when analyzing an existing form.

THE CITY OF NEW YORK

FORMS CONTROL PROGRAM

SHEET NO.

DEPT

DATE

LIST OF COMMONLY USED FORMS

(List in alphabetical order by functional grouping and include NYC and Comptroller's Forms. Submit 2 samples of each form to Central Forms Unit.)

FUNCTIONAL GROUP NO.	FORM NO.	FORM TITLE	SOURCE OF SUPPLY	ANNUAL QUANTITY	ANNUAL COST	REMARKS

This form was prepared during a demonstration session. It illustrates the type of work which can be done on the Vari-Typer DOJ. It is not intended as an example of form design.

This form was used at the beginning of New York's forms control program. Functional groupings appear below.

NEW YORK'S FUNCTIONAL GROUPINGS OF COMMONLY USED FORMS

I. ACCOUNTING AND AUDITING

- Fund accounting
- Payment vouchers

II. PERSONNEL

- Applications
- Budgetary control
- Call letters
- Identification cards
- Leaves of absence
- Oath of office
- Payrolls
- Personal history
- Resignations
- Service ratings
- Time records

III. PURCHASE AND STOCK CONTROL

- Abstracts of bids (or quotation summaries)
- Purchase control records
- Request for bids (or invitation to bid)
- Requisitions
- Stock records

IV. MEMORANDA

- Building passes
- Intra-departmental
- Telephone
- Visitor's call

V. MAIL AND FILES

- Charge-outs
- Cross-reference
- Record of letters received
- Routing forms

VI. COMPUTATION SHEETS

VII. MULTI-SERVICE ENVELOPES

VIII. MOTOR VEHICLE

- Accident report
- Gasoline, Oil and Mileage
- Repairs
- Tires
- Use Report

THE CITY OF NEW YORK

FORMS CONTROL PROGRAM

MANUAL OF FORM DESIGN

CONTENTS

FORM SIZES	I
PAPER GRADES, WEIGHTS, COLORS	II
REPRODUCTION PROCESSES	III
TYPE FACES, RULES, CITY SEALS	IV
BINDERY AND MISCELLANEOUS OPERATIONS	V
TYPES OF FORM CONSTRUCTION	VI
FORM DESIGN	VII
ENVELOPES	VIII
TAGS	IX
CARBON PAPER	X
SPECIFICATION WRITING	XI

APPENDIX

CHAPTER I

FORM SIZES

OBJECTIVES

In determining the proper size for a form the objectives to be achieved are:

a. The smallest size that is practicable for the specific purpose.

b. A size that will cut without waste from a standard sheet size.

c. The minimum number of sizes for all of the forms used.

d. Economies in costs of paper, press-work, binding, filing equipment, etc.

FACTORS TO BE CONSIDERED

The basic factors to be considered in selecting a standard size for a form are:

a. Quantity and arrangement of data to be entered on the form.

b. Sizes of other related forms or forms used in the same procedure.

c. Binding and filing requirements.

d. Carriage widths and margin requirements of typewriters or other machines on which the form may be used.

e. Standard sizes of envelopes in which the form may be enclosed.

The size of the form should provide sufficient space for normal or average quantities of data to be entered thereon. It should not be predicated on infrequent needs for recording unusually large amounts of information. In those cases in which additional space is sometimes required, it is generally more economical to use additional sets of a form than to adopt a size large enough for maximum possible requirements.

STANDARD FORM SIZES

The standard form sizes which are included in the printing requirement contract are listed on the following page. Standard sizes of "specialty" forms, such as snapout, continuous, etc., are shown in Chapter VI—Types of Form Construction.

HOW TO SPECIFY FORM DIMENSIONS

In specifying the sizes of forms, the first dimension shown indicates the position or "direction" of the printing. For example, on an 8½" x 11" form the 8½" dimension is considered as the top of the form, and where the size is given as 11" x 8½", the 11" dimension is considered as the top.

CHAPTER XI

SPECIFICATION WRITING

OBJECTIVES

In writing specifications for a form the objectives to be achieved are:

a. Clarification of all details pertaining to the design, physical aspects, and production of the form.

b. Avoidance of misunderstandings and delays in the procurement of the form.

c. Effectuation of the standards established by the forms control program.

FACTORS TO BE CONSIDERED

The factors to be considered in preparing specifications for a form are set forth in detail in the preceding chapters of this manual.

SOURCES OF INFORMATION

In addition to this manual, the following contain information pertaining to specifications:

Printing requirement contract

Standard instructions to bidders—printing

Supplement to instructions to bidders—printing

Contract for blank books

Contract for envelopes

Contract for tabulating punch cards

Contract for "stock" continuous forms

Previous purchase orders for forms

SPECIFICATION WORKSHEET

For each form to be procured specifications should be prepared on the Form Printing Specifications worksheet, from which the pertinent information should be transcribed onto the purchase requisition. A specimen of this worksheet appears on the following page.

SAMPLES

While all instructions and data pertaining to the production of a desired form should be indicated on the purchase requisition, copy, arrangement, and style of composition and ruling should be shown on a sample of the form which should be attached to the requisition.

Samples should not be used as substitutes for detailed specifications since they do not provide adequate and sufficient information concerning the many factors involved.

Three pages from New York's new Manual of Forms Design. Original pages are 8½" x 11", bound in a leather ring binder. Each chapter follows the same outline and the book contains numerous illustrations and tables. The forms specification sheet, mentioned at right above, appears on page 62.

responsible for administration of the program within their respective departments. Designation of a forms representative is the first step which a department takes in accepting an invitation from the Budget Director to join and participate in the forms control program. (The word *invitation* is significant because it reflects the basic concept of attaining the program's objectives through *selling* and demonstration of the benefits which can be realized.)

A coordinating committee consisting of the departmental forms representatives and the staff of the central forms control unit, and of which the coordinator of the city-wide program is chairman, meets bi-monthly. At these meetings program progress and developments are discussed and proposals of special subcommittees are considered.

Training of departmental forms representatives is conducted in conference groups limited to 15 participants. Each group meets in a series of ten two-hour weekly sessions devoted to the various aspects of form design and control. At a preliminary meeting, two or three weeks prior to the first training session, the objectives and scope of the program are discussed. Trainees are asked to ascertain the number of forms used by their respective departments and the procedures they follow in processing printing requisitions. This information is discussed at the first training session, the subject of which is Forms Control Procedures. Topics studied and discussed at subsequent weekly meetings are: Form Sizes; Paper Grades, Weights, Colors; Reproduction Processes; Composition; Bindery and Miscellaneous Operations; Types of Form Construction; Form Design; Envelopes, Tags, Carbon Paper; Specification Writing.

After the first training session, the forms representatives proceed to establish the forms control program within their departments. Usually the first step is the circularization of a directive, issued by the department head, which announces the establishment of the program, its objectives and designates the forms representative to whom all requisitions for forms will be submitted for review. At succeeding sessions specific problems and program progress are analyzed and discussed. Each forms representative brings to the meeting samples of his department's forms for evaluation and demonstration of specific applications of the techniques of form design.

A *Manual of Form Design,* jointly prepared by the sponsoring agencies, edited by the coordinator of the city-wide program, and published by the Bureau of the Budget, serves both as a training aid and a guide for the administration of the program. Another important and helpful tool is the city's annual printing requirement contract which includes "the printing by letterpress of forms, circulars, cards, letterheads, noteheads and other printed matter covered by the classes enumerated." This contract, awarded annually on competitive bidding, sets forth the prices and charges for paper, composition, presswork, penruling and the various bindery and miscellaneous operations. With this information, department forms representatives are able to compute production costs and prepare comparative cost estimates of contemplated revisions of existing forms.

Guest speakers who are specialists in related fields frequently participate in the training sessions to contribute knowledge required for effective administration of the program. Among such speakers have been representatives of the city's printing and blank book contractors, printing buyers of the Department of Purchase, inspectors of paper and printing of the Controller's office, and the paper expert of the American Telephone & Telegraph Co. Visits to the plants of the printing contractors have been included in the training schedule.

By the end of 1953, 69 forms representatives of 47 departments and agen-

FC-3 (7-53)

FORM PRINTING SPECIFICATIONS

THE CITY OF NEW YORK
FORMS CONTROL PROGRAM

TRANSCRIBE PERTINENT INFORMATION FROM THIS WORKSHEET TO THE PURCHASE REQUISITION.

DEPARTMENT	BUREAU	DIVISION	SECTION

FORM NO.	FORM TITLE	PARTS TO SET	SIZE (FLAT)	SIZE (FOLDED)

☐ CONSTRUCTION	☐ FLAT ☐ CONTINUOUS ☐ SNAP-OUT ☐ OTHER
☐ CONTINUOUS	☐ MANUALLY SEPARATED ☐ AUTOMATICALLY ☐ MARGINALLY PUNCHED TYPE AND MODEL NO. OF MACHINE
☐ SNAP-OUT	SIZE OVERALL SIZE DETACHED ☐ TOP ☐ BOTTOM POSITION OF STUB ☐ RIGHT SIDE ☐ LEFT SIDE

☐ PAPER STOCK	COPY	GRADE	COLOR	WEIGHT	REMARKS
	☐ SINGLE	%			
	SETS ☐ ORIG.	%			
	☐ DUPL.	%			
	☐ TRIPL.	%			
	☐ QUAD	%			
	☐				

☐ RULING	☐ PEN ☐ TYPE RULES ☐ ONE SIDE ☐ TWO SIDES ☐ ALIKE ☐ DIFFERENT
☐ COMPOSITION	☐ AS PER SAMPLE ☐ SAME AS FORM NO. ☐ CHANGE ON PARTS
☐ PRESS WORK	COLOR OF INK ☐ ONE SIDE ☐ TWO SIDES ☐ HEAD TO HEAD ☐ HEAD TO FOOT ☐ SIDE TO HEAD ☐ 2 SIDES SAME ☐ 2 SIDES DIFFERENT
☐ REGISTER	☐ FORM MUST REGISTER EXACTLY IN SETS OF ☐ FORM MUST REGISTER EXACTLY WITH FORM NO.
☐ NUMBERING	☐ SINGLE ☐ DUPL. ☐ TRIP. ☐ QUAD STARTING NO. COLOR OF INK
☐ PERFORATING	☐ PRESS ☐ PINHOLE ☐ HORIZONTAL ☐ VERTICAL
☐ GATHERING	IN SHEETS
☐ STITCHING	☐ TOP ☐ SIDE ☐ BOTTOM ☐ SADDLE
☐ PUNCHING	NO. OF HOLES ☐ SIDE ☐ TOP ☐ BOTTOM DIAMETER ☐ ROUND ☐ SLOTTED IN. C. TO C. IN. EDGE TO C.
☐ CORNERING	☐ DIAGONAL ☐ ROUND ☐ ONE ☐ TWO ☐ FOUR CORNERS
☐ CARBONS	INSERT SHEETS ☐ INTERLEAVED ☐ IN REAR ☐ PENCIL ☐ TYPEWRITER ☐ ONE-TIME
☐ PADDING	NO. SHEETS TO SET NO. SETS TO PAD NO. SHEETS TO PAD ☐ AT TOP ☐ RIGHT SIDE ☐ LEFT SIDE
☐ BINDING	☐ MANILA ☐ PRESSBOARD SHEETS TO SET SETS TO BOOK SHEETS TO BOOK
	☐ TOP ☐ BOTTOM ☐ RIGHT SIDE ☐ LEFT SIDE
☐ LABELING	☐ ON BACK BONE ☐ ON FRONT COVER TITLE
☐ PACKAGING	☐ BAND QUANTITY ☐ WRAP QUANTITY
☐ OTHER SPECIFICATIONS:	

PREPARED BY:	DATE	APPROVED BY:	DATE

The form specifications worksheet used by New York City.
(Original is 8½" x 11".)

cies (many designate more than one representative) had participated in five training series. This year, the remaining agencies and departments will be included in the forms control program and their representatives will receive the same training.

Upon completion of their training, the forms representatives become members of the city-wide coordinating committee. Meetings of this committee provide continuous training as well as administrative follow-up by the central forms control unit. The latter also provides on-the-job counseling and guidance for forms representatives both at its office and in field visits by the city-wide program coordinator and his staff.

Quarterly progress reports submitted to the central forms control unit by the departmental forms representatives indicate that the program has "taken root" and has already produced significant results in forms which are more functionally efficient and lower in cost than those they superseded. Many forms have been eliminated. The general appearance of forms shows marked improvement. Smaller, standard sizes are being specified and greater use is being made of sulphite bonds with a corresponding reduction in quantities of rag content papers previously used.

Some progress has been made in the standardization of forms commonly used by the various departments and agencies. Initial study of eight functional classifications of such forms has been started by specially designated subcommittees of the coordinating committee. Recommendations of these subcommittees will be submitted to each of the participating departments for their consideration and evaluation prior to ultimate adoption of standard forms to be used by all departments.

Most of the essential phases of forms control procedure have been instituted in the participating departments and agencies. In most cases, numerical files have been installed. Functional files are being developed in the departments and the central forms control unit is compiling a functional file of the commonly used forms. Improved inventory controls have provided bases for determining purchasing quantities, minimized waste and unearthed obsolete forms for the salvage heap. Use of specially designed worksheets for the preparation of specifications for printed forms has simplified and expedited procurement.

Review is being made of stationery items such as writing papers, carbon paper, pads, etc., which are stocked in a central storehouse of the Department of Purchase, to standardize such items, eliminate non-essentials and minimize varieties.

Departmental retention schedules, developed through the records management program, provide essential information for the determination of paper grades for record forms. When the initial phases of the records management program have been completed and the forms control program has been fully established in all municipal departments and agencies, forms control will be incorporated into records management to provide for integrated control over the creation, procurement, use, maintenance and disposition of forms and records. The nomenclature of the present Records Management *Section* and Forms Control *Unit* of the Division of Analysis of the Budget Bureau indicate the contemplated organizational relationship.

With forms control within the individual departments and agencies—and city-wide coordination, direction and guidance centralized in the Budget Bureau—the principal advantages of both centralization and decentralization have been attained. To this plan of program organization and administration, and to the enthusiastic and highly intelligent cooperation of department heads and their forms representatives, are primarily attributable the encouraging results thus far achieved and the confidence in even greater accomplishments in the future.

REBOUNDER

A secretary should earn her money. Never make it easy for her to hear you. Dictation cleverly banked off the wall is certain to call forth her admiring sighs. When your letters come back hopelessly muddled, call her in and proceed to give her a piece of your mind. Off the wall, of course.

GLAMOUR BOY

That well-manicured look is quite desirable. After all though, Smitty, filing your nails while dictating might give the young lady goose pimples as well as being a bit distracting. Sure, we've done it ourselves. At least the soles of your shoes don't have holes in them. Right nice looking.

OFFICE ETIQUETTE

THE fellow who concocted this little story engaged in a self-analysis project to study his office mannerisms—his little discourtesies to fellow workers—and to note them. This he did and here's the result with pictures and comments based on actual happenings. Although "Smitty's" innocent faults, as well as those of a few of his associates, are not shared by many; they are presented for whatever value they may have in improving office etiquette.

This entire feature appeared in *The Inch*, employee magazine of Texas Eastern Transmission Corp., Shreveport, La., of which Jack Clarke is director of public relations. The "models" are Texas Easterners Forrest Nettles, Jean Hardin, John Blewer and Harry Marmion.

SMELLBINDER

It's your desk, isn't it? Therefore, you have a right to lay that cigar anywhere you want to. The best spot, of course, is right underneath the secretary's nose. This treatment is guaranteed to give her eyes that fresh, out-of-doors, barbecued look, so much admired in today's young secretary.

TEMPER TESTER

". . . and I saw the most gorgeous dress . . . guess how much it cost?" What do you care if the boss is waiting on you to handle some important and urgent work. It's a free world, ain't it? Should the boss' face turn a deeper shade of purple, better sign off for the sake of his blood pressure.

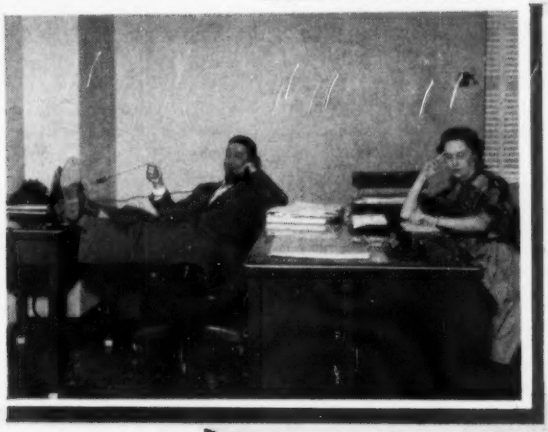
BARKER

New-fangled gadgets like telephones with interoffice lines and buzzers don't interest Smitty. When he wants someone in the next office he just yells. The reverberation off hard surface walls is wonderful to hear in Smitty's estimation—and didn't his wife tell him he had a wonderful voice?

MUMBLER

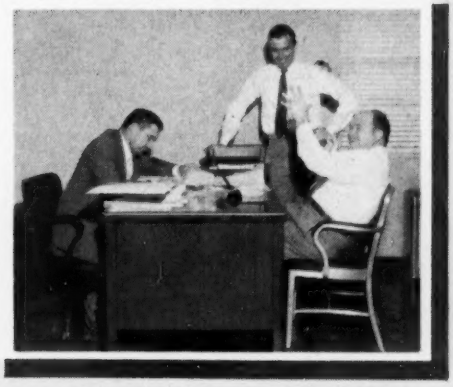
"Dear Sir: Yours of the mosrecentcinstant noted, and we are pleased to say that unnerforseeable circumstances . . ." This is the 'Love Me, Love My Cigar' school of dictation, daring and considered difficult. Danger lies in the fact that the secretary may understand what you're saying.

FRATERNITY BROTHER



"What's that, Joe? Have we really been talking thirty minutes? Oh, well, that's okay ol' buddy, I have plenty of time, just a few more letters to dictate. It's always good to hear from an old school chum. Mary doesn't mind waiting 'til six o'clock, she's a real sport, ha-ha. Lemme tell you what happened last night."

THE HAPPINESS BOYS



"So the girl says, 'Who's there?' And the guy says . . . Why, Smitty boy, you aren't listening to us. Trouble with you, Smitty, is you work too hard. Relax. Live it up a little. I can't understand why you're always so busy. We're all caught up. All right, ALL RIGHT, we're leaving!"

PEEPER

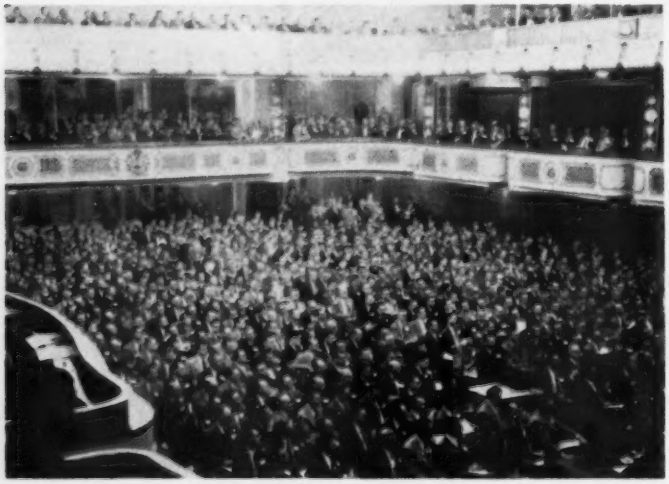
So what's new today? Nothing like looking over the mail in old Smith's basket. Well, well, ". . . and if you don't remit within ten days we will be forced to . . ." All sorts of information can be found on Smitty's desk. And he doesn't mind if you look, he always grinds his teeth that way.

Integrating the Office For Automation

LAST MONTH, some 1,700 executives had a peek at the steps taken by several companies in an approach to the automatic office. This was at a special conference of American Management Assn. in New York. The ways in which General Electric Co. and E. I. du Pont de Nemours & Co. are using electronic equipment and new concepts of integrated data processing were described.

The conference program highlight was an explanation by United States Steel Corp. representatives of that company's common-language integrated data processing system with a closed-circuit television demonstration of 30 office machines. John Walrath, manager, methods and procedures, Services Dept., Accounting Services Div., General Electric Co., Schenectady, N. Y.; James M. Kalbach Jr., group supervisor, methods group, Management Engineering Section, Engineering Services Div., E. I. du Pont de Nemours & Co., Wilmington, Del.; and Harold Price, manager, Systems Dept., Price Waterhouse & Co., Chicago, served as a panel to comment on the U. S. Steel presentation and contribute facts from their companies' experience. K. B. Willett, vice president, Hardware Mutuals, Stevens Point, Wis., and AMA vice president in charge of the office management division, served as chairman of the session.

GE's most advanced electronic computer program, which Mr. Walrath described as a "first in industry," is under way at Appliance Park in Louisville, Ky., where business procedures personnel "are accomplishing the first real programming of an industrial company's major office problems for a large electronic computer." The computer, which was delivered in Louisville last month, soon will begin to take over various business and accounting tasks. (THE OFFICE, December, 1953, p. 81.) It will calculate payrolls and automatically print cost distributions, paychecks and personnel reports; perform material scheduling and inventory control duties; prepare invoices and compile sales statistics; and "eventually will do the



The great interest in office automation was indicated by this capacity crowd which registered for the American Management Assn. conference, Intergrating the Office for Electronics.

It's a Red Letter Day!

INTRODUCING THE

Director 200

ADDING MACHINE

Styled to grace the most modern office . . . designed to give the utmost in operating ease . . . built to provide the unfailing dependability that's a hallmark of Burroughs products! It's today's newest, smartest adding-subtracting machine—it's today's best adding machine buy! Available in 8- and 10-column capacities, with or without credit balance feature. Electrically operated. Or if desired, detachable handle quickly converts to hand operation with all other features remaining the same. Burroughs Corporation, Detroit 32, Michigan.

WHEREVER THERE'S BUSINESS THERE'S

Burroughs

division's complete cost accounting and general accounting."

Mr. Walrath gave three other examples of electronic data processing or preparation for it at GE. In the accounting services division at Schenectady, a combination of teletype punched paper tapes and punched card equipment is speeding, by leased telegraph facilities, the consolidation of profit and loss statements and balance sheets from 132 plants in 101 cities in 24 states. Up-to-date financial statements are available to management earlier and the books of distant plants are being held open several days longer since there need be no allowance for mailing time.

A combination of punched paper tape, punched cards and photo-copying equipment is used in a production control and a payroll operation at a plant in upstate New York. There the operation is built around the use of standard business machines with information manually transcribed and verified only once. Subsequent reproduction is mechanical, electrical or chemical.

Several surveys of existing office routines are being conducted in various parts of the company to determine whether large-scale electronic data processing equipment is economically feasible for a particular application. "The studies always improve procedures," Mr. Walrath said, "even though we may decide not to install the electronic devices."

Du Pont, Mr. Kalbach said, is following much the same line of thinking as U. S. Steel. Starting out in one department to eliminate duplicate clerical effort between production control and sales, the engineering services division has branched out into the entire gamut of the department's business from the inception of an order to the payment of a bill. When a sales order is received, it is transmitted on a five-channel tape to a warehouse and the bill of lading is automatically received at that end. The shipment is made, an endorsed shipping paper is returned to the sales office and an invoice is prepared from the original tape. The price and the dollar extensions are the only information that must be added. This is now being done on a calculator. However, Mr. Kalbach pointed out, if the calculator were tied into the other equipment, the job would be simplified and the invoice produced with fewer operations.

Selected information is sent by leased wire to a central location. This information goes out as a five-channel tape and is received in facsimile form. This tape is processed through punched card equipment to produce sales inventory figures for each branch warehouse, lists of backlogs and future orders, rates of sales, figures for production scheduling, and a duplicate deck of cards from which sales analysis figures may be taken. Eventually there will be still another deck of cards to produce accounts receivable records.

Full use of common-language machines, Mr. Kalbach said, requires complete standardization of procedures, meticulous attention to detail, time to "de-bug" the systems and people trained to operate the machines, devise and install the systems. "This," he declared, "is one of our biggest future problems. We had better all get on the bandwagon and get our people trained before the parade begins."

Another major problem, according to Mr. Price, is the volume of tape produced in such systems. "We use our tape to run a machine and at the same time we produce another tape. We convert the tape to a card and then the card back to a tape. At this point we are smothered in tape—it is coming out of our ears. Tape handling and filing problems could become serious. Someone should develop a system of parallel tapes or tape spacing to pick up the information added to the tape at various stages of the process, except where teletype or other wire transmission is used. We would then have a continuing data concept instead of a self-perpetuating concept."

Excerpts from presentations by ex-

Silly, isn't it?

● *To separate little adhesive stamps, to lick and stick them? To lock up stamps in a tin box—or lug them around in your wallet until they stick together?*

And especially silly these days, when any office can afford a little DM postage meter!

● The DM *prints* postage, any amount, for any kind of mail, as you need it—directly on the envelope, or on special tape for parcel post. Prints your own small ad, if you want one, at the same time. And has a moistener for sealing envelope flaps.

● You always have the right stamp with the DM, which holds as much postage as you want to pay for at one time. It protects your postage from loss, theft, spoilage. And automatically accounts for postage.

● Big convenience. Saves mailing time—and postage. Anybody can use one... Other meter models, hand or electric, for larger offices. Ask the nearest PB office to show you. Or send the coupon for the free illustrated booklet.

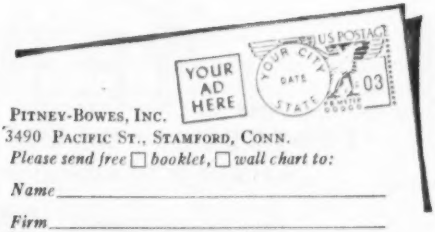
FREE: ***Handy wall chart of Postal Rates with parcel post map and zone finder.***

The DM desk model Postage Meter is ideal for branch offices as well as small businesses.

PITNEY-BOWES

Postage Meter

Offices in 93 cities in U.S. and Canada



PITNEY-BOWES, INC.
3490 PACIFIC ST., STAMFORD, CONN.
Please send free ☐ booklet, ☐ wall chart to:

Name _____

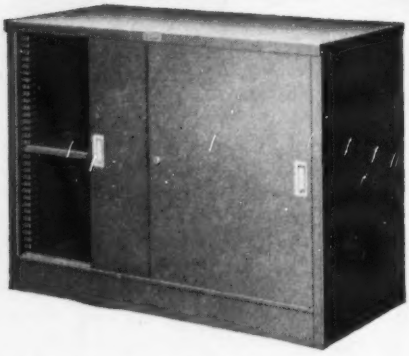
Firm _____

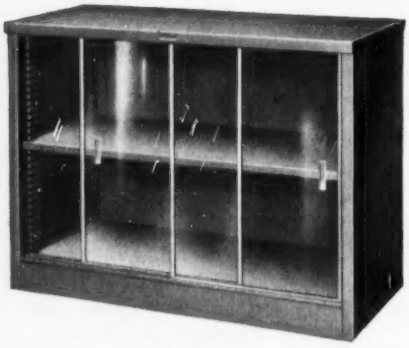
Address _____

a hit

BORROUGHS

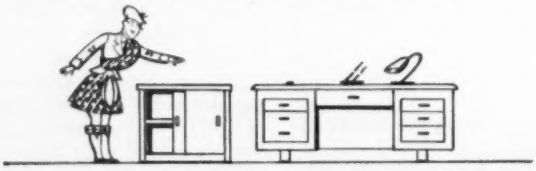
"desk-hi" sliding door cabinets





with steel doors! **with glass doors!**

Over the top with a bang! That's just what "Desk-Hi" accomplished overnight! To see it is to buy it. Most useful and practical cabinet you've ever seen. Handy as the telephone . . yes, indeed, it makes an ideal combination cabinet and telephone stand. Puts the old fashioned space-eater swing-door cabinet in the attic with Aunt Emma's bustle. "Desk-Hi" is 29" high . . 38" wide outside and is available in 2 depths (12" and 18") . The sliding shelf is adjustable without bolting.



BORROUGHS MANUFACTURING COMPANY

A SUBSIDIARY OF THE AMERICAN METAL PRODUCTS COMPANY OF DETROIT

3002 NORTH BURDICK amp KALAMAZOO, MICHIGAN

ecutives of United States Steel Corp., given as part of the exposition of the company's integrated data processing system before this special conference of American Management Assn., appear below and on pages 75, 78, 79 and 80.

FUNDAMENTALS OF INTEGRATED DATA PROCESSING

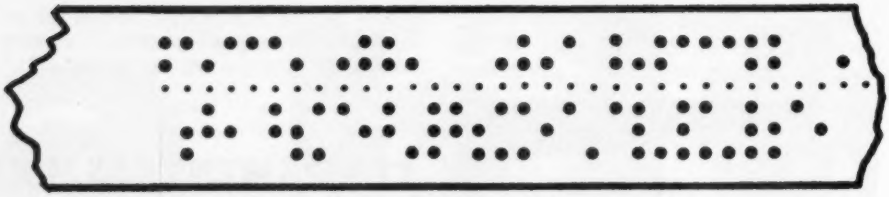
H. F. VAN GORDER
Director, Methods Planning Division, United States Steel Corp.

THE business of United States Steel Corp. requires the recording and processing of data pertinent to the procurement, manufacture and sale of our products. It also requires that complete information be currently available to all levels of management so that their decisions result in the continuation of our business on a sound basis. The lapse of time between events and the necessity for logical decision based on these events is narrowing relentlessly. The problem, then, is to satisfy these data processing requirements in a comprehensive and timely manner.

The solution becomes obvious when we realize that all data have their beginning: the day, hour or minute of birth or origination. Why not record these data automatically or manually at the time and place of origin on devices which preserve the data in a mechanical form? Then require that all subsequent processing of data be performed and preserved in mechanized form. This solution is distinguished from the conventional approach by three points of difference:

1. *Original* data are recorded *at their point of origin* in a mechanical form.
2. Once in *mechanical form,* data are *processed exclusively* in a *mechanical manner.*
3. All processing of data is *integrated so that original data* in mechanical form *serves all subsequent applications.*

This solution requires a basic compatibility between different types of machines and between the machines of different manufacturers. A common language is required to mechanically transfer raw data between the various equipment. We selected a five channel punched communication code for this purpose. This is the uniform communications code which has been the standard of our telegraph systems. It includes the 26 letters of the alphabet and the ten digits. Office machines now using the same code include recorders, adding machines, bookkeeping machines, typewriters, calculators, card and tape punches, and high speed data processing equipment. Open or blank code signs allow flexibility for such functions as: stop, carriage return, line feed, plus, minus, tabulate, etc. Thus the five-hole punched tape becomes the common language link



Five-channel punched tape for common language machines.

between the original recording and all subsequent data handling.

Our concept of utilizing this common language is to record data on machines which create punched cards or tapes as the automatic by-product of the recording operation; and process original and subsequent data on machines which read and punch tapes or cards. All data are self-perpetuating. We group processing into the basic stages of origination, calculation, distribution, conversion, high-speed processing, and communications.

Origination means applications and machines which are primarily or usually directed toward recording data at its point of origin.

Calculation means applications and machines which involve a large degree of arithmetical manipulation: adding, subtracting, multiplying and dividing with relatively simple distribution.

Distribution means applications and machines which are primarily directed toward addition and accumulation of multiple totals.

Conversion means the devices used for converting from one mechanized media to another. These include punched tape to punched card, punched tape to magnetic tape, punched tape of a given channel width to punched tape of a different channel width.

High-speed processors are basically devices which are completely electrical or electronic as opposed to mechanical or electro-mechanical. Small and large electronic computers are examples of this type. Applications of this equipment have been concentrated in the area of large volume and complex mathematical calculations for scientific research. Recently, there has been considerable activity and interest directed toward the application of high speed processing to the commercial processing of data in the business world.

Communications are, of course, the telephone and telegraph facilities.

Members of our methods planning staff outline applications and machines in these basic groupings, and explain the application of integrated data processing fundamentals through the use of common language machines on the pages following.

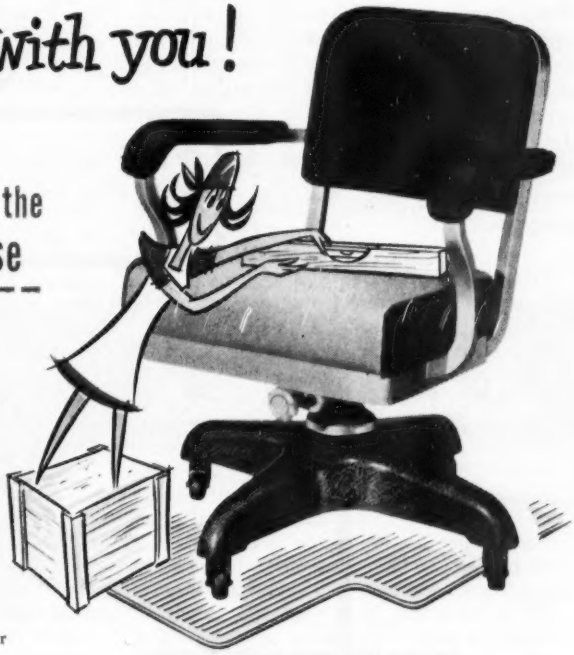
What are the logical steps to follow in establishing integrated data processing through common language machines? No attempt can be made to provide detailed instructions which would have universal utility. However, the method of application below is the basis for our detailed planning:

1. Appoint a coordinator for integrated data processing.
2. Prepare a master chart of the clerical processes, defining:
   a. Major functions within the fundamental clerical processes of

FIGURES					3				8						9	0	1	4		5	7		2		6					
LETTERS	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Space	Tab	Space	Cr.	L.F.
CODE CHART	1	1		1	1	1				1	1						1		1		1		1	1	1	1	1	1			
	2		2				2		2	2	2	2				2	2	2			2	2	2				2	2			2
	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			3			3		3	3		3		3	3		3	3		3		3	3		3	3		3		3	
		4	4	4		4	4			4	4		4	4	4			4				4		4			4	4		4	
		5					5	5				5	5		5	5	5			5		5	5	5	5	5	5				

Uniform five-channel punched code.

Here's a chair that Levels with you!



...It's the chair with the Fiber Glass Base

Yes, sir, the Sturgis fiber glass base is automatically self-leveling. Your weight always keeps all four casters firmly on the floor, even when you "ride" off the chair mat. Remember also that this is the base that just can't be harmed by office abuse, never looks shabby, never needs refinishing. Gray, green, walnut or black, on 9 executive and stenographic models.

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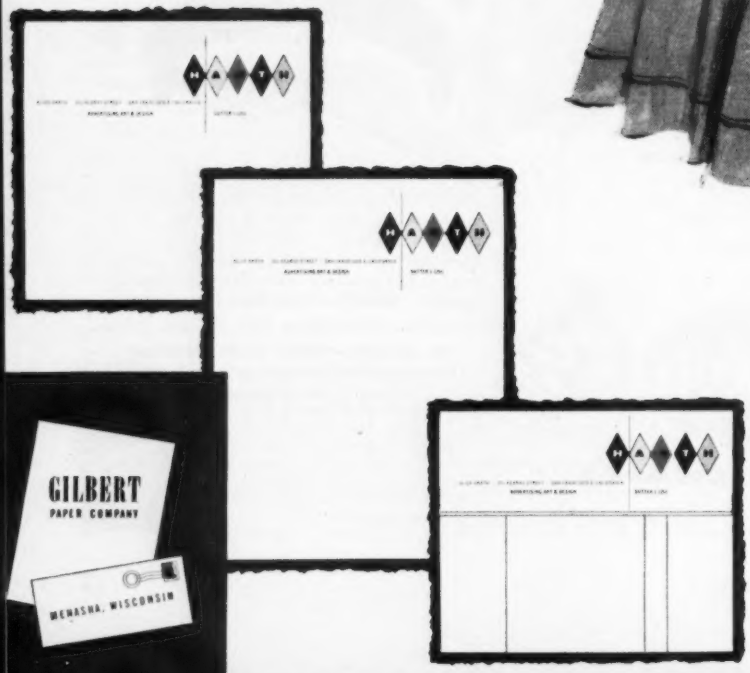

sales, production and purchasing.

b. Data received, originated and produced by each function.

3. Establish two basic rules:
   a. Record data at point of origin on office machines which create five-channel punched tapes or tabulating cards as the automatic by-product of the recording operation.
   b. Perpetuate original and subsequent data by means of office machines which read and punch tapes or cards.
4. Select the functions to be mechanized in the current year.
5. Mechanize the selected functions within the framework of Rules 3a and 3b.
6. Plan the mechanization of all remaining functions in sequence from the beginning to the ending functions.
7. Mechanize these remaining functions in sequence and within the framework of Rules 3a and 3b.

DATA ORIGINATION

H. W. MOORE

Accounting Methods Planning Division, United States Steel Corp.

IN the clerical end of business we are confronted with the age-old problem of streamlining procedures by eliminating the repetitive type of transactions. With the integrated data processing concept, the transcription of data is automatic with a higher degree of accuracy and control. I will deal primarily with the recording of data at the point of origin. The common language machines which I will discuss in this regard are:

1. Adding machines.
2. Production recorders.
3. Typewriters.
4. Bookkeeping machines.
5. Cash register units.
6. Communication machines.

ADDING MACHINES:

Codes representing the digits 0 to 9 and required controls are punched into a tape by the punch simultaneously with the operation of the machine. For instance, if the numerical 9 key is depressed on the keyboard, holes representing the code for 9 is punched into the tape. This tape is fed through the reader on a machine of another design in a succeeding operation. This provides the linkage between the two machines carrying out the common language principle. In many cases, the printed tape may suffice as a record, or may meet requirements if it is attached to a given document. For those who prefer a form, the printed captions may be arranged vertically. Let us explore the possible applications of the adding machine with the punched tape.

PRODUCTION RECORDERS:

In recording any product, it is reasonably certain that the essential elements are an order number and identification of the product. You might want to add other descriptive data that would be helpful in determining costs, such as equipment number and size. These data are probably taken from the original order and all of them are descriptive in nature. In addition to the four elements and the total that have been punched into the tape, control codes are interspersed to direct machines in succeeding operations to perform certain functions.

One application that is known to all is the physical inventory. Other applications for the adding machine with the punched tape are receiving and shipping, and the tape may be used to punch cards that provide records for production planning and control. Production measurements can be attained through the use of mechanical and electronic devices that control the quality of the product, measure and record production, and create a punched tape as a by-product of these operations. The flexibility of the machine is further expanded by programming, in which functions are performed automatically and selected data are processed through

multiple punches and readers.

TYPEWRITERS:

The keyboard varies only slightly from a standard typewriter. It is, in effect, a standard electric typewriter connected with tape punches, and tape and card readers. Punches and readers are connected with the type bars and functional keys by electrical relays. Operation of the keyboard causes codes to be punched into the tape in much the same manner as for the adding machine.

Assume that, by coincidence, an order was received from the ABC Corp. while we were visiting the sales office and it called for an item that they have repeatedly ordered. The clerk pulls the prepunched tape from the file to start typing the order. While the automatic typing is going on, a tape is simultaneously punched. This tape will be sent to the plant and used to automatically type the invoice. For sales statistics the tape is converted to punched cards.

Another example of how we can apply card or tape operated machines to clerical functions is in the area of purchasing. Inasmuch as each purchase item is identified, it is reasonable to assume that a unit card or tape can be punched. The buyer need only determine the price, terms and vendor. Once this is known, and the proper indications on the requisitions have been made, the file for that item is routed to the machine operator to write the purchase order. The prepunched tape or card to identify the vendor and items is attached to this requisition. Therefore, the operator need only feed these data, in tape or card form, into the machine to produce the purchase order automatically. Simultaneously with writing the purchase order, we produce another tape, representing data on the purchase order, to be used automatically in the next stage of the process.

I cannot emphasize too greatly the importance of programming which performs functions automatically, permits selected data to be processed through multiple punches and multiple readers. In a recent test, it was found that ap-

(Continued on page 84)

The office machines which are operated by a common language punched tape to do the clerical work required in production control.

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DATA CALCULATION AND DISTRIBUTION

JAMES THOMSON

Accounting Methods Planning Division, United States Steel Corp

IN the preceding description of data origination, Mr. Moore mentioned machines and applications for recording data at the point of origin on office machines which create punched tapes or cards as the automatic by-product of the recording operation. Now let us consider the direct use of punched tape or edge punched cards for processing in office machines which read the common language.

There are four types of office machines which we would like to discuss. First, there is the electric typewriter already mentioned as a data origination machine which, however, has the facility to *read* punched tape or cards as well as to punch the common language. Second, there is the automatic embosser for preparation of addressing plates. Third, there is a combination of a typewriter with a calculating unit which reads and punches. Fourth, there is in the making, a bookkeeping machine to read and punch the five-channel punched paper tape.

The electric typewriter with reader and punch is a data processing machine to the extent that it can be programmed to read from two tapes selectively and in any desired sequence, perform machine functions automatically and type repetitive data from the program tape, and punch several tapes simultaneously or in selective sequence. In its simplest form this machine performs the following:

1. The reading unit will interpret the tape and automatically actuate the typing unit to reproduce information at approximately 100 words per minute.
2. A stop code in the tape will cause automatic stopping so that variable information can be typed manually when required.
3. The information automatically typed from tape or manually typed on a document can be perforated in tape for further processing.

When you add to this the facility to read from two tapes selectively; to perform functions of the machine automatically through the program tape; and to punch several tapes simultaneously or in selective sequence, then it becomes a highly flexible unit for system applications in the following areas: purchasing, receiving and inventory control; order, invoice and shipping; disbursing and payroll. Other applications that can be included: production reports, inventory reports, utility bills, address slips or labels, form letters.

These examples help visualize that wherever information is repetitively used in preparing documents, either by itself or with variable data, the common language punched paper tape can be fed into a machine to produce automatic, high speed reproduction free from transcription errors. Further, where variable data are introduced along with repetitive data, new tapes can be produced incorporating this combined information for further processing on other machines.

The Graphotype as you are aware, produces embossed plates carrying information embossed from a keyboard. A unit has been developed which will read the common language punched tape, actuate the type bars, and automatically emboss Addressograph plates. In the above applications of the electric typewriter with tape reader and punch, we mentioned uses of the automatic Graphotype. Other applications can be cited as follows: insurance premium notices, tax notices, hospital admittance, identification tags.

It has been possible to wed the keys of a rotary calculator with an electric typewriter. By means of automatic control circuits, we can automatically tabulate the output of a calculator using an

(*Continued on page 89*)

HIGH SPEED PROCESSING

L. W. CALKINS

Accounting Methods Planning Division, United States Steel Corp

OUR common language media is a five-level punched paper tape. Some machines require a six, seven or even eight-level code to understand the true meaning of our data as we have it in the five-level code. The objective, therefore, is to be able to translate our common language to the native languages of the various machines we intend to apply. Let us call the equipment necessary to perform this a "converter."

The only other term to be defined is "programming." Consider the three fundamental rules which must be meticulously followed in any standardization program:

1. You must decide what you are trying to attain and then plot it step-by-step.
2. These steps must be so standardized that they can be coded in a way to activate a machine.
3. The source information which will flow through the procedure-steps must be coded so that it activates a machine.

The above is exactly what we do now for a punched card system and, with but one exception, the electronic standardization program is the same. The exception is that no longer will you stress the specific areas of payroll, inventories and so on, but you will think in terms of the impact of a single transaction on all functions.

It would be rather impractical to change our entire system to utilize a new machine, and certainly it would be rather costly. We must, therefore, find a common denominator which, most important of all, should be created as a by-product of the original recording.

Let us consider a conversion which is familiar: punched tape to punched cards. Consider what we have accomplished in this simple step — we have taken the common language and converted it to the native language of punched card equipment. Of course, the converse is true in that we can convert the card back into tape and make it common again.

As the tape is sensed in the conversion process, pulses are available at the control panel of the machine. By correctly wiring this panel, we can recode information, delete data, insert repetitive data, into the card, which is common to the units of information on the tape. We have, in its most basic form, given operating instructions to the process.

If we are faced with a machine whose native language requires a six, seven or even eight-channel punched paper tape as input, this can be accomplished through a converter which will accept our common language and perform the task at the rate of between 600 and 1,200 characters per minute. Once again, the converse is true in that the higher levels of punched tape can be made common again. By virtue of these converters, we have the ability to create the native languages of any equipment and with it we are in a position to select the machines best suited to our business. Let us consider how we are actually in a position to make the final step into the area of high-speed, data processors in view of our common language tape.

I purposely use the term "data processors" throughout for it is my belief that we no longer think of them as computers, but rather as machines capable of handling many types of information flowing through a business at amazing speeds. There are high speed data processors that use punched cards as input and output and they have the ability to store large volumes of data, available immediately upon command during the calculations. However, in most cases, they use a magnetic tape which affords a much faster media from which to read and record.

Currently available are machines that

(Continued on page 95)

COMMUNICATIONS

R. W. BARIDON

Accounting Methods Planning Division, United States Steel Corp.

WHEN reference is made to five-channel punched tape, it is natural to think of communications. It is estimated that more than 80% of all telegrams handled over common carrier and private wire services are tape transmitted, wholly or partly, from point of origin to destination point. Now that five-channel punched tape is being developed to handle integrated data processing through common language machines, it is logical to conclude that the communication services will play an important part in this program, particularly when time and distance are factors.

Since telegraph facilities for both common carrier and private wire services available to the public are identical, excluding those in use in large network operations, only the items which directly or indirectly involve integrated data processing will be described. These include page type teleprinters, automatic tape punching and transmitting teleprinters, receiving-only teleprinters, non-printing tape reperforators, printing type tape reperforators and transmitter-distributors.

A manual sending and receiving page type teleprinter is the unit most frequently used in the communication services. It does not produce tape, neither does it transmit tape. The automatic tape punching and transmitting teleprinter is, in effect, a combination of three separate units under one housing, *i.e.*, the manual page type sending and receiving unit, a tape punching unit and a transmitter-distributor. A receiving-only teleprinter is merely a manual sending and receiving machine with the keyboard disconnected. Tape punching units are usually called reperforators. The electric non-printing and printing type are most frequently used, although a manual perforator for punching service wires is available in large network operations. A transmitter-distributor, commonly called a transmitter, is supplied on all automatic teleprinter units.

Keyboards on teleprinters have three banks of keys. All the letters of the alphabet appear in caps in the lower section, the numerals in the upper section of the top bank, and miscellaneous characters such as punctuation marks, $, £, %, etc., in the upper sections of the other two banks. Additional keys are provided for Figures, Letters, Line Feed and Carriage Return.

Our subject now logically leads into a discussion of the use of this equipment in the available communication services, namely: inter-city transmission via common carriers, inter-city transmission via private wires, and intra-plant transmission at locations where operations are both extensive and scattered. Assume we are dealing with an office with a volume of business too small for private wire service, but for which there may be a need to use the common carrier services under the concept of integrated data processing. There are several classes of service available:

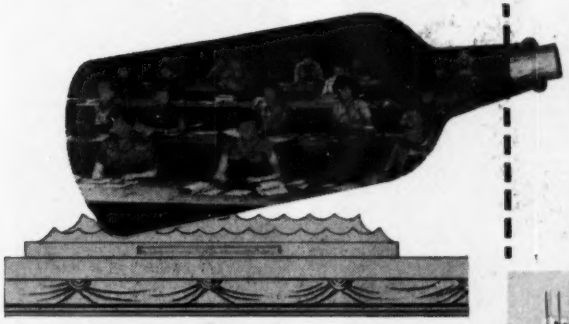
Teletypewriter Exchange Service, commonly referred to as TWX. This service provides a direct connection between two points and can be operated on a private wire basis. If it is desired to produce and transmit tape on communications equipment, the public carrier will substitute an automatic teleprinter for the manual unit at an increased monthly rental.

Telemeter Service provides a direct connection between two points and can be also operated as a private wire service.

Commercial Telegraph Service may be used when other services are not available. There are limitations, however, as to the type of copy which can be handled.

(Continued on page 96)

OLD FASHIONED MAILING METHODS
BELONG ON THE MANTEL



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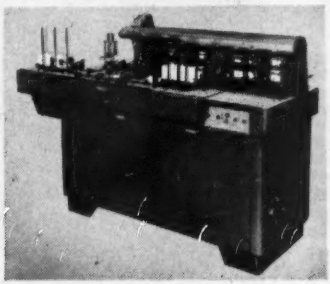

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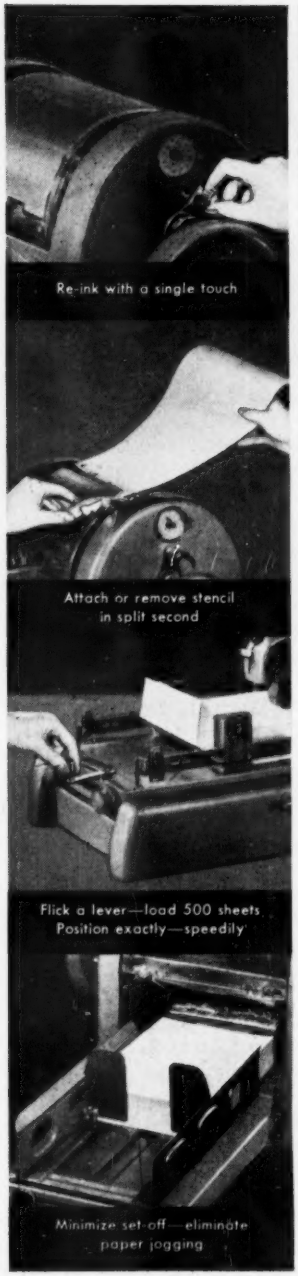
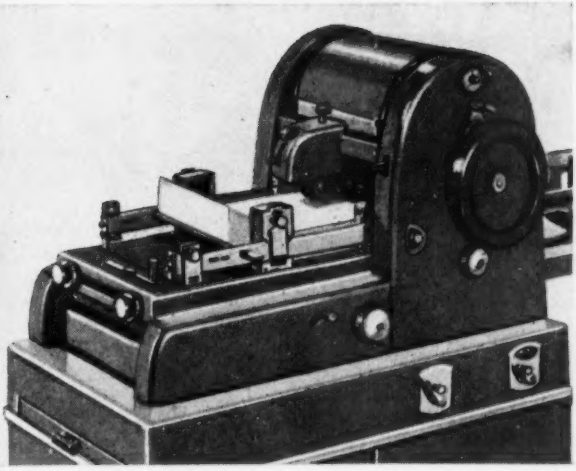
Almost 50,000 at OMAC 12th Annual Business Show

The 12th annual business show of the Office Management Assn. of Chicago last month at the Conrad Hilton Hotel attracted a record-breaking attendance of almost 50,000. The exhibits at the four-day Show occupied every square foot of space and featured many new products. OMAC at the same time conducted its annual Management Seminar, the discussions including numerous well-known authorities.

A corner of the exhibit area at the OMAC Business Show.

Registrants at one of the OMAC seminar sessions last month in Chicago.





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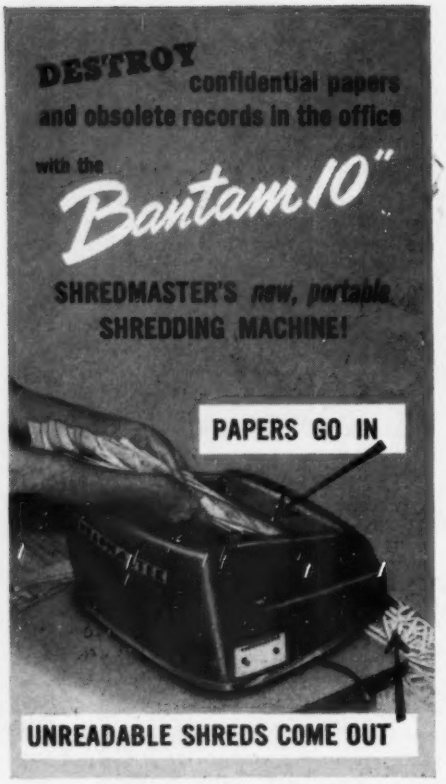

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New Books

(*Continued from page 55*)

FUNDAMENTAL PRINCIPLES OF ACCOUNTING *by C. A. Moyer and Hiram T. Scovill. John Wiley & Sons, New York, pp. 631, $6.*

The authors, who are professors at the University of Illinois, rightly believe that accounting has proved a useful tool in the early business careers of many who have risen to high positions. Also, a knowledge of accounting aids the executive to understand the accounting records and reports which are used to guide all business. This first-year text covers the fundamentals of a complete accounting cycle. Then there is a section on modern office procedure, payroll, partnership and corporation work. Questions and problems are included and a Workbook for Problems is available for students.

LIGHT ON THE FUTURE. *International Business Machines Corp., New York, pp. 30, Free.*

Describes the principles and components of electronic data processing equipment. Compares the construction and applications of analogue and digital computers, explains the organization of digital computers, and describes briefly the functions of input, storage, arithmetic, control and output components. Memory devices like magnetic tapes, magnetic drums and cathode ray tubes are described in detail and the booklet includes a glossary.

Data Origination

(*Continued from page 76*)

proximately 80 functional key strokes, normally required in a normal typing operation, were eliminated by programming. All the key depressions for tabulating, carriage return and vertical spacing are eliminated through programming.

BOOKKEEPING MACHINES:

A bookkeeping machine with tape output can be used advantageously in many

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clerical areas as an originating machine. One typical example of its use is on a bank application. A bank teller places the pass book in the machine to record a deposit or withdrawal. The purpose is to record the account number, previous balance and amount while automatically establishing a new balance. The amount is coded as either deposit or withdrawal at time of posting. Simultaneously a five-channel punched tape is produced and forwarded to the bookkeeping department. The tape, originated by the teller, is processed through a tape-to-card machine for punching cards. The cards, when punched and balanced, are arranged into account sequence for posting to the various ledgers.

CASH REGISTERS:

The cash register provides the means to account for cash at its origin and also permits a distribution of sales to various departments and clerks. This information usually is printed on a transmittal tape. An even greater use of the cash register can be made today for now it is possible to perforate a tape which, when forwarded or transmitted to a central location, can be used to automatically produce supplementary reports and summaries.

COMMUNICATIONS MACHINES:

Mr. Baridon (page 80) explains how communications machines tie in with the integrated data processing principle. However, I would like to explain how these machines can be used to originate data.

Take a distributing and manufacturing location and its unusual system for controlling and consolidating the on hand inventories of 130 distributors' locations throughout the U. S. The maximum number of items carried in inventory at each location approximates 200 different models. On Friday afternoon of each week, the distributing locations manually prepare an inventory report which shows the following information for each model: (1) Balance on hand previous week; (2) Received current week — factory; (3) Received current week—other source; (4) Dealer ship-

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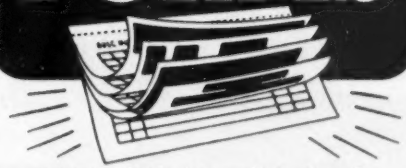

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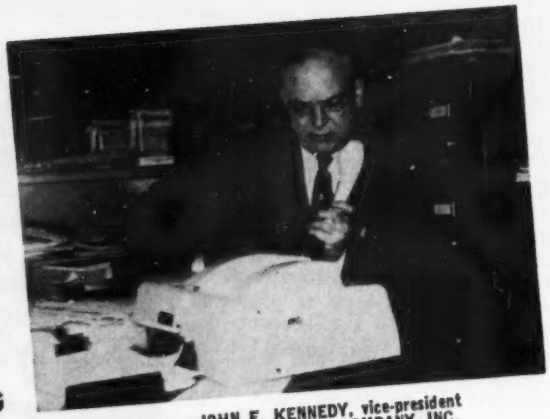
SIGNED .....

We said it... Now everyone's saying it!

REX RECORDER

THE FINEST DICTATING MACHINE MADE TODAY!



Name . . . JOHN F. KENNEDY, vice-president
Company . . . UTICA OFFICE SUPPLY COMPANY, INC.
Address . . . 14-18 Devereux Street, Utica, N. Y.
Established in 1915

Mr. Kennedy shown above using the REX RECORDER. He says . . . "THE REX RECORDER convinced him dictating machines were a good line to handle."

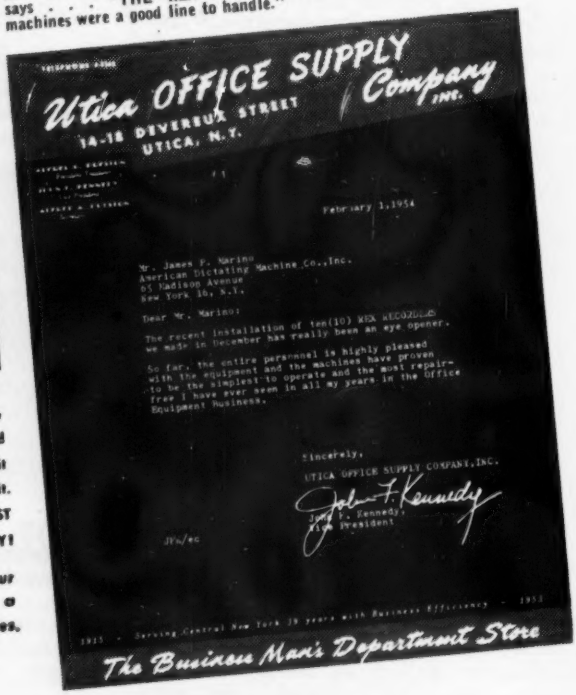
"...practically a lifetime of free use..."

"...a miracle of engineering..."

"...repair-free construction..."

"...dictate or transcribe on the same unit..."

"...magic eraser permits 10,000 uses per disc..."



Utica OFFICE SUPPLY Company INC.
14-18 DEVEREUX STREET
UTICA, N.Y.

February 1,1954

Mr. James F. Marino
American Dictating Machine Co.,Inc.
65 Madison Avenue
New York 16, N.Y.

Dear Mr. Marino:

The recent installation of ten(10) REX RECORDERS we made in December has really been an eye opener.

So far, the entire personnel is highly pleased with the equipment and the machines have proven to be the simplest to operate and the most repair-free I have ever seen in all my years in the Office Equipment Business.

Sincerely,
UTICA OFFICE SUPPLY COMPANY,INC.
John F. Kennedy
John F. Kennedy,
Vice President

JFK/ec

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Write for the name of your nearest dealer . . . for a free demonstration at your offices.

EXCLUSIVE NATIONAL DISTRIBUTORS

AMERICAN DICTATING MACHINE CO., INC.

65 Madison Avenue, New York 16, New York

ESTABLISHED 1923

ments only; (5) Stock on hand. Totals, for control purposes, are prepared by class or model for each of the quantities shown on the report.

At the close of business each Friday, the manually posted inventory record is delivered to the nearest telegraph office where the information is wired to the home office of the manufacturer. A receiving machine is located in the manufacturer's office and it prints a hard copy of the report simultaneously with the perforation of a five-channel tape. The tape produced is then processed through a card punch.

An average of 10,000 cards, representing the inventories by model and distributor, are punched from the five-channel tapes received in the home office. These cards, when balanced to the controls, are combined with description cards and processed in tabulating machines to consolidate and print a weekly inventory status report. This application is a typical approach in expediting vital figure facts for management's use through a common language machine.

Data Calculation

(*Continued from page 78*)

electric typewriter as the tabulating or writing medium. The operation of a mechanical desk calculator involves essentially three steps: input, computation, and output. This basic combination unit is not a replacement. It simply integrates two vital office machines which already enjoy widespread use.

The combination typewriter-calculator combines an electric typewriter (with reader and punch as previously described) with a rotary calculator. The calculator unit, as such, is located within a desk and is programmed so that when the operator enters a multiplicand and multiplier in the typewriter keyboard, the extension is made in the calculator and the product is automatically tabulated by the typewriter. Further, the total of a series of products can be automatically tabulated and fixed

For OFFICE, SCHOOL, FACTORY, STORE, Etc.

New Combination STAMP PAD and PEN SET by MP

Approved by Bankers

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Time studies taken by a leading California bank chain prove that the new MP Stamp Pad and Pen Set greatly increases efficiency of personnel working with rubber stamps by combining stamp, pad and pen in one place.

Features include: Locked-in stamp pad. Sturdy aluminum, gray hammertone finish. Compact size (8½x3½x 1¼). Completely reversible for left- or right-hand use.

Complete Set, *including #1 uninked stamp pad and Paper Mate Desk Pen*

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DEALER INQUIRIES INVITED. Investigate the complete MP line of bank and office appliances.

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Please send complete details on the new Stamp Pad and Pen Set.

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grubby-looking letters?

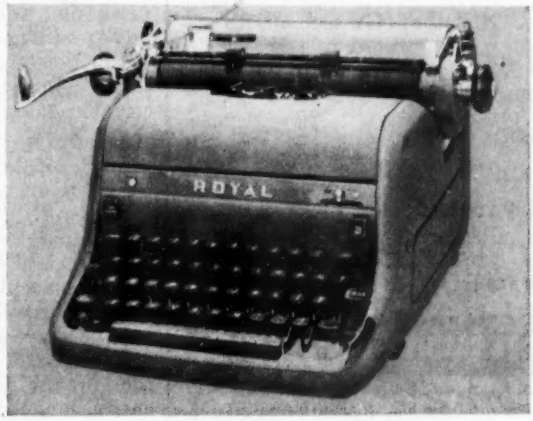
You can have the cleanest-looking letters you ever signed . . . cost? . . . about 1 cent a day . . . how? by trading in your old typewriters at 5 years instead of 10 . . . for new Royal Standards, of course.

From new Royal Standards you get increased typing production, cleaner-looking, better-groomed letters, memos, and reports . . . higher office morale and better employee relations—intangibles that are hard to define but mighty apparent when missing.

You also get the finest, most rugged precision writing machines built. Another point—they take less time out for repairs, too.

Remember, Royal's the typewriter preferred 2½ to 1 by people in business who type.

All this is quite a promise, but why not let us prove it? Ask your local Royal Representative to give you a demonstration (this means he'll show you how the new Royal works and give you the details of the 1-cent-a-day story). He won't have to ask for an order.



REPRESENTATIVE { He's listed in the Classified Telephone Directory

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LET ME HELP YOU
IN YOUR OFFICE OR OURS

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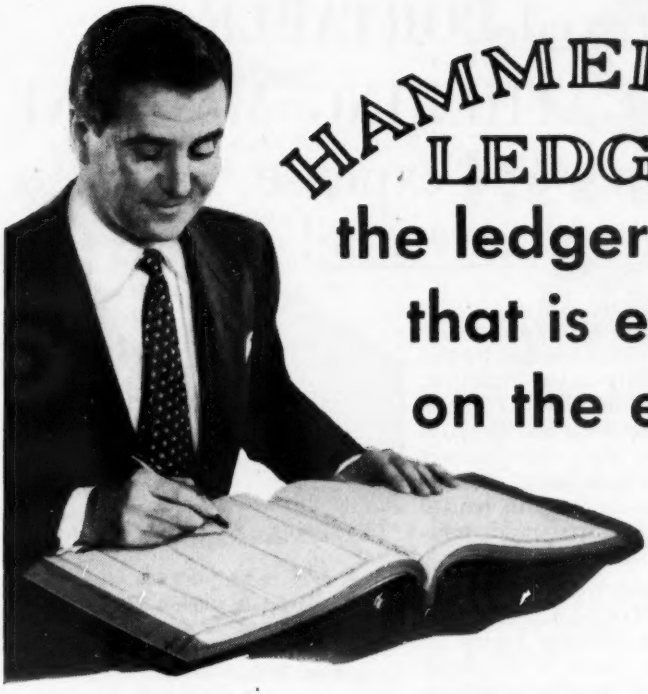
amounts added or subtracted. The unit can be plugged into a card punch and programmed so that selected numerical data is automatically punched in a tabulating card for further processing.

The use of bookkeeping machines with tape attachments has a great potential in the integration of data processing. We have the assurance of all the manufacturers that development of such a unit is progressing and good results are predicted in the very near future. Applications visualized include the posting of transactions to inventory records, accounts receivable ledgers and other proven areas where the bookkeeping machine is now in use.

With these descriptions and individual applications of the electric typewriter, automatic Graphotype, combination electric typewriter and calculator, and bookkeeping machine (all equipped with tape reader and/or punch) we might consider a complete systems application of this equipment under the concept of integrated data processing in the field of sales data processing which covers the following areas: sales order and acknowledgement, production planning and control, inventories, shipping, invoicing, accounts receivable, sales statistics.

Briefly, we would integrate the processing of data on a sale from the writing of an order all the way through its execution to the receipt of payment and the preparation of statistics. This is a fulfillment of the integrated data processing concept. This application to a large extent follows the direct use of punched tape in the processing of data.

The second main course to follow in the processing of original data recorded on the common language five-channel punched paper tape is through conversion to other media or native languages such as punched cards, magnetic tape, punched paper tape with additional code channels, etc., for processing in tabulating and high speed electronic equipment. This area is covered by Mr. Calkins (page 79).



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Better typing and writing! Pen or typewriter, entries on Hammermill Ledger are neater, more legible. And for sharp, clear bookkeeping-machine entries, choose from the special items watermarked "Posting Finish."

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Lasts longer! Special fiber treatment gives Hammermill Ledger added durability to stand up under repeated handling, retain its fine appearance for years.

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You can obtain business printing on Hammermill papers wherever you see the Guild shield on a printer's window.

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saves time and expense anywhere...anytime!

▶ Most companies recognize the fatigue and confusion created by the task of assembling sales bulletins, price lists and other types of duplicated papers into sets. Yet because these operations may be "spread out" through many different departments, it is often difficult to realize that they cause hundreds and thousands of dollars of needless expense.

With this light weight compact Thomas Table-Top Collator, you can put 8 extra helping hands to work anywhere there is a paper assembling job to do. One operator . . . working easily and comfortably gathers completed sets twice as fast as by old-fashioned hand assembly methods, with verified savings to 50%. And the Table-Top is accurate as well as fast . . . permits a constant check on every collated set so that blank or misprinted pages don't slip through . . . so simple that anyone can operate it.

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5 and 8-bin models available.

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Tilted bins and patented Ejectomatic feed—assure smooth, dependable operation.

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Hand lever can be located right or left—for operator's maximum convenience.

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No set up time—always ready for use.

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1-year guarantee—maintenance costs practically non-existent.

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Permits collating of both 8½" x 11" and 8½" x 14" sheets.

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FREE. Write for Collating Demonstration and/or Collating Analysis Sheet . . . shows you how to save up to 50%. Also available, free bulletins on new Table-Top Model, floor models, and high-speed Tandem.

135 SALES AND SERVICE OFFICES FROM COAST TO COAST

Processing

(*Continued from page 79*)

will convert punched cards to magnetic tape at the rate of 200 to 250 cards per minute and perform a verification of the conversion simultaneously. In this case we energize a series of output devices in a line capable of placing a detectable magnetic spot upon the tape. Another machine is currently available to convert from magnetic tape to punched cards at a rate of 200 cards per minute with the resulting cards converted to punched paper tape.

Magnetic tape can be also directly prepared on a machine similar to a typewriter. In reality, it is a converted typewriter and, simultaneously with the preparation of the magnetic tape, a printed document is made to give visual indication of the recording. The machine is self-contained and in addition to its standard typewriter keyboard, it has ten keys for rapid digit entry.

An example of the flexibility that can be obtained during a simple operation involving mixed languages can be seen in an available office machine resembling a typewriter having both an eight and five-level tape reader as input. As output, the machine not only prints document but has several five-level tape perforators as well as an eight.

High speed data processors afford the user an opportunity to bring into reality many things he has never done before. The answers to some of the more puzzling questions about his business, such as the most economical lot size for production, the most economic inventory size, and the most efficient use of manpower and machines, and others; can be obtained and the hours of computation required under our present methods can be reduced to minutes. Still further, a service can be rendered to our engineering departments because these machines can answer many of their problems and, in doing so, the quality

TRY Star TYPE CLEANER FREE!

Send for Free Star Type Cleaner NOW! Write today on business letterhead!

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Use this handy plastic box later for spare paper clips, stamps, etc.

No dangerous fumes! No mess or bother! Simply press Star Type Cleaner on part to be cleaned . . . dirt comes away with it!

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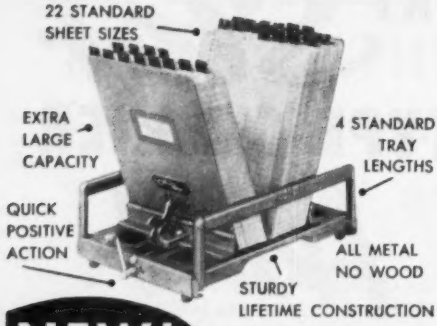
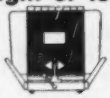


NEW! 1955 MODELS

Hadley

SPEED POSTING TRAY

3 reference positions — **sheets offset right or left**



The choice of banks and businesses everywhere. Combines functions of posting tray and reference binder in one unit. Fast, easy adjustment and full legibility of both sides of sheets enable employees to do more work in less time . . . with less effort. Investigate.

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OPENS LIKE A TRAY
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and production of the product can be improved.

Through the common language tape we are compatible with present equipment, be it bookkeeping, punched cards, or high speed data processors as we know them today. We can and should ask that future machines be capable of accepting the common language and generating it again, upon the completion of their function. We will then have the ability to break our integrated chain of events momentarily and through conversion take advantage of it and then return to the main line. A firm foundation is absolutely essential. We believe that, through the by-product generation of the five-channel punched paper tape common language, our base is sound. Through the ability to convert to the native language of any equipment, our future is flexible.

Communications

(*Continued from page 80*)

Now let us look into the requirements for inter-city transmission of copy over private wires. In the private wire services, most of the circuits in general use are referred to as either single or duplex. A single circuit is a one-way channel requiring transmission "in turn" by the stations served. A duplex circuit has two channels permitting stations at either end to transmit simultaneously.

The manual sending and receiving page type teleprinter is the unit most frequently used in private wire services. When operated on a single circuit, it provides a home record copy of everything transmitted from the keyboard. When operated on a duplex circuit, it is necessary to add a receiving-only unit for incoming traffic to obtain a copy of outgoing traffic.

The manual teleprinter, by itself, falls far short of what is required for integrated data processing. The most important thing to remember is that communication equipment can handle five-channel tape produced by other devices,

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ADDING CALCULATOR

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★ An Electric Adding Calculator at manual machine investment. "Unilectric" actually costs less than other manually operated machines.

★ A solution of the "help" problem: "Unilectric" operators learn quicker, produce more, stay happier, longer in their jobs.

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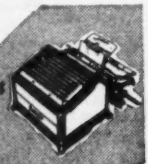

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and can reproduce this tape for conversion and processing through any equipment which fits into the program for integrated data processing, provided that punched codes conform to the standards established for the communication services.

Where there might be a need for intra-plant communications at locations where operations are both extensive and scattered, the use of standard telegraph equipment and circuits between production, clerical and data processing centers should be funneled through a central switching installation. To avoid the 25% Federal Communications Tax, it is recommended that the facilities be purchased outright and that a maintenance contract be entered into with the public carrier furnishing the equipment. The facilities used in intra-plant services are identical to those previously described. A point to remember in providing circuits, particularly in connection with established private wire networks, is the fact that wire rentals on short haul lines represent only a minor part of the total circuit cost. On long haul lines they comprise pretty much the major part.

It would be appropriate at this time to describe an installation which qualifies for transmission of data to be processed at distant points through common language machines. To identify the operations and flow of traffic, I shall list them as follows:

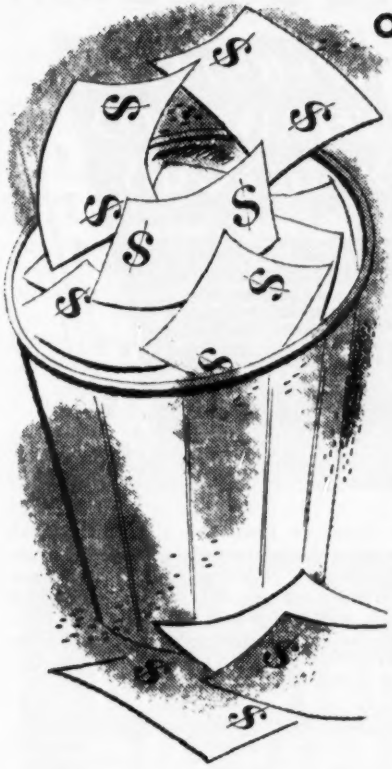
LOCATION A: Headquarters office with 10,000 employees. This is the location of the data processing bureau. Communications equipment provided: an automatic teleprinter and a printing type reperforator.

LOCATION X: District office with 4,000 employees. Equipment provided: two automatic teleprinters, (one a spare).

LOCATION Y: District office with 2,000 employees. Equipment provided: two automatic teleprinters (one a spare).

At Location A where the data processing center is situated, the payroll records for employees of all three areas are maintained. Master cards are pro-

IMPORTANT money goes out in your wastebasket



One of the country's large firms did a study on waste—the waste of letters that had to be retyped. And their surprising finding is that 48¢ goes out the window every time a mis-typed letter goes into the wastebasket—time *and* paper are money!

EZERASE fine bond and onion skin with a *plus* is the ANSWER—the plus feature is absolutely clean erasures with an ordinary lead pencil eraser. Everything that's typed can be made on the *original* try.

Write us on your company letterhead for sample of Ezerase Bond.

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Fine Paper *Preferred* By Business

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BOND · ONION SKIN
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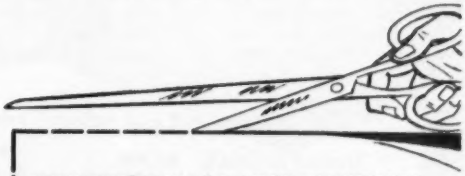

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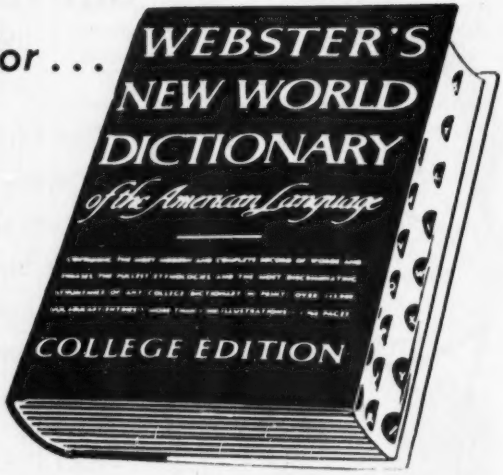

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More Entries (142,000)
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More entries, carefully chosen (142,000) . . . more pages (1,760) . . . more complete etymologies . . . more descriptive synonyms . . . more examples of usage . . . more scientific, business, social terms . . . more idioms, slang, colloquialisms . . . more pictures (1,220 illustrating more than 3,100 terms).

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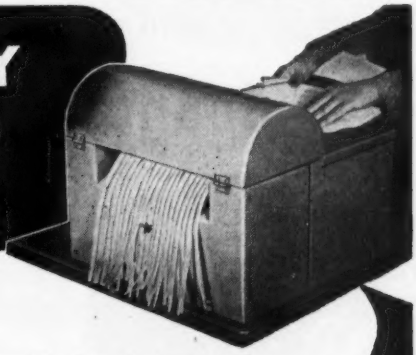
vided for each employee showing all repetitive information and fixed payroll deductions. The changes in fixed payroll deductions are reported only at the end of the pay periods. These reports are sent by wire and immediately converted into punched cards for revision of the basic record.

When the time arrives for preparation of the payroll, all the cards representing the master record, standard deductions, daily exceptions, attendance reports, etc., are thrown into the hopper at Location A. Out of this tabulation, the following are produced: employee's pay statements, pay envelopes, labor union reports, supply store collections, payroll voucher requests, payroll denomination lists, etc. These are mailed to Locations X and Y prior to payday.

The application which I have just described uses punched tape created miles away for delivery and handling at a distant data processing bureau. There are many other applications for the use of communications in integrated data processing through common language machines, as for example, the handling of sales-production orders.

I would like to conclude with a word of caution, since it would be very easy to go overboard in the use of wired communication. The telegraph services can be rather expensive if used extravagantly. Therefore, I should like to mention two other types of communications which are available, and which can and should be brought into any program for integrated data processing. I refer to messenger service by regularly scheduled automobiles covering two or more operations in a limited geographical area, and to the United States mails when dependability and speed of service between cities can be relied upon. Every condition should be thoroughly documented and analyzed. If you need technical advice and counsel, you will find the services of the communications companies available upon request.

THE EASY WAY TO DESTROY OLD PAPERS



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City.....State.....

Perfect Service...

Like the BEST tennis balls OLD TOWN RIBBONS serve you BEST because they're sealed in air-tight cans!

Only OLD TOWN ribbons come to you *guaranteed factory-fresh* — with the freshness hermetically sealed in. You pay no more for such air-tight protection — for these sharper-writing, longer wearing ribbons. OLD TOWN ribbons hold more ink, are non-filling, non-fading, can't dry out on store or office shelves.

Next time you change a ribbon, try a really *fresh* ribbon — an OLD TOWN ribbon — and SEE the difference! For the name of your nearest OLD TOWN dealer write us *today.*

Change to Old Town

You can depend on...

Old Town
CORPORATION

45 MADISON AVENUE
NEW YORK 17

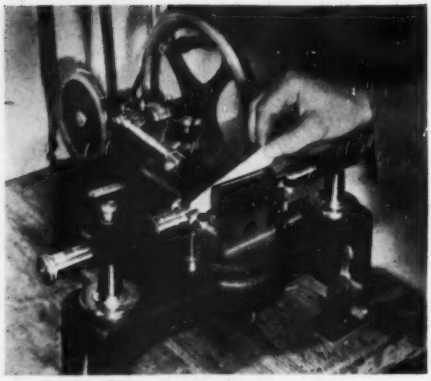
World's foremost maker of ribbons, carbons, duplicators and supplies.

BUSINESS EXECUTIVES find new economy and efficiency in

HOW envelopes can be used to advantage

WHAT types and sizes are best for each use

WHY it pays to specify U.S.E. Envelopes



PAPER IS TESTED FOR FOLDING QUALITIES

At U.S.E. laboratories, samples of envelope paper are tested in this Schopper Fold Machine, to see how many double folds the paper can stand before breaking. U.S.E. folds a piece of paper thousands of times so you can safely fold it once!

How good is "good enough?"

Two envelopes may look alike at first glance, yet be quite different in strength, color, opacity, surface, precise folding, smooth gumming, safe sealing, accurate count, sturdy packaging. A fault anywhere along the line can cause trouble for you.

So why take chances? WHY not make sure that the envelopes you buy are good all the way? And to find out what to look for, send for the book "What's in it for me?". You'll find it fast cover-to-cover reading.

WHO has this book for you?

The world's largest manufacturer of envelopes, and your envelope supplier. Ask for the *complete* story: the "Handbook" which tells HOW and WHAT; and the book "What's in it for me?" which tells WHY. Together they reveal *what's in it for you.*

E3-B2

UNITED STATES ENVELOPE COMPANY Springfield 2, Massachusetts

15 Divisions from Coast to Coast

Gives *instant* answers—no presetting of dials, bars, levers to slow you down. Floating Touch speeds figure work by making it *easier*. Three-Way Error Control gives automatic accuracy. Call the Comptometer representative.

Electric and non-electric models

DIRECT ACTION DOES IT FASTER

COMPTOMETER ADDING-CALCULATING MACHINES are made only by Felt & Tarrant Manufacturing Co., and sold exclusively by its Comptometer Division, 1715 North Paulina Street, Chicago 22, Illinois. Offices in principal U. S. cities and throughout the world.

COMPTOMETER

COLE'S NEW

Concealed

SECRET VAULT

Top index drawer can also be used for cancelled checks.

COLE STEEL EQUIPMENT CO., INC., 285 MADISON AVE., N.Y. 17, N.Y.

ACTUAL SIZE LOCK

SAVES TIME... *All your records at your finger tips*

SAVES MONEY... *Prevents pilfering of supplies and tools*

REALLY PRIVATE... *Concealed vault safeguards your valuables*

The "MERCHANTS" File

A heavy gauge steel cabinet containing two ball-bearing letter files, index drawer for 3x5 or 4x6 cards (3200 cap.); 2 adjustable compartments under lock and key; steel safety vault with large vault size dial lock (only YOU know the combination).

32" high, 30½" wide, 17" deep. Olive green or Cole gray, baked enamel finish.

No. 1370

a low $49.95

With plunger lock which automatically locks all drawers. No. 1370PL.....$57.45

NOTICE!

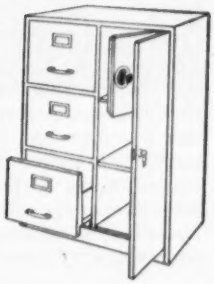
Actual size of lock shown above (not a "blown-up" picture), should not be confused with imitations . . . COMPARE!

The "DIRECTOR" File

Similar to No. 1370 except instead of the card drawer a third letter size filing drawer has been added. 37½" high.

No. 1473 ..... $53.95

The above with plunger lock that automatically locks all drawers. No. 1473PL $61.45



Grained walnut, mahogany or knotty pine finish $12.50 additional.

Prices slightly higher in Texas, Colorado and West of the Rockies.

CUTS OR PHOTOGRAPHS OF ALL COLE PRODUCTS ARE AVAILABLE ON REQUEST.

SEND FOR COLE'S LATEST CATALOG

New Products

ADDING MACHINES

Burroughs Corp., Detroit 32, Mich., makes the Burroughs Director 200 line of full-keyboard electric adding machines with modern, streamlined styling and many new features designed for ease and flexibility of operation. Adjustable spacing controls permit multiple spacing

of figures on the tape from one to five spaces or a maximum of 5/6". This provides room for tape notations and flexibility for use with bookkeeping forms. These controls also provide "pop-up answers" from the total key, which allows the operator to tear off the tape below the total figure without twirling the platen knob forward. Key action of the new line has been redesigned so that a light touch results in soft, smooth operation, reducing operator fatigue. A transparent tear-off blade allows full visibility of all figures on the tape. If hand operation is desired, a new type speed-stroke handle is provided which automatically cuts off the electric motor when inserted in the machine. Oversize platen twirler permits fast feeding of tape. For servicing or cleaning, case is easily removable by releasing two latches under the base. Grip-spaces are provided on the base to facilitate portability. At present they are producing four narrow carriage models, two 8-column, and two 10-column machines with and without credit balance. Machines are exceptionally quiet due to built-in acoustical features and cushioned suspension of the machine in its case. Color of the new line is nonreflective, two-tone amber gray to eliminate eyestrain.

PHOTO-ELECTRONIC DUPLICATOR

Standard Register Co., Dayton 1, Ohio, announces the Photronic Reproducer which combines principles of photography and electronics to print instantaneously without physical contact. The first such reproducer has been delivered to the Air Force at Wright-Patterson Air Base, Dayton, and others are expected to be available commercially next year for reproducing office records from microfilm or opaque copy. Copypaper used by machine requires no special coating or treatment before or after reproduction. Standard Register is building the reproducer under license from its subsidiary, Huebner Co., based on patents of William C. Huebner. Reproducer has two chambers, separated by optical glass with a special coating on one side. At the end of one chamber is a light source and holder for transparent material to be reproduced. Image is projected on the glass' uncoated side. For opaque copy, reflected light is

used. Marginally punched paper is fed in front of the coated side of the plate. In the other chamber, an electrostatic grid furnishes a high voltage charge to propel a mist of dye to the paper's surface in the form of the projected image. No special paper is required and the principle could be adapted for printing paper or fabric, coating paper or making carbon paper. Since printing is instantaneous, reproduction speed is limited only by the speed at which paper moves across the plate. All operator does is turn two knobs and push a button.

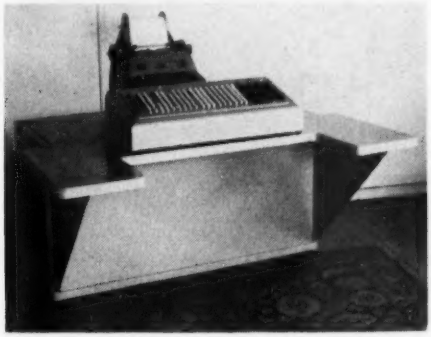
BOOKKEEPING MACHINE

National Cash Register Co., Dayton 9, Ohio, announces the 158 low-cost bookkeeping machine with many features found in higher priced National accounting equipment. The 158 has a front-feed carriage for creating ledger, statement and journal records simultaneously. Carriage has fully automatic tabulation,

automatic opening and automatic return to initial posting position. Machine's functions are directed by a form bar at the rear. Operator has no concern with numerous buttons and levers; the control panel automatically causes the machine to add in debit columns, subtract in credit columns, non-add reference numbers, print the date in the proper column, etc. Control panels are removable and may be switched in a matter of seconds to change from one posting job to another. Balances and credit balances are computed and printed automatically and there is line-by-line direct proof of posting. Separate accumulator automatically adds the net total of all charges and/or credits posted, as a double check for accuracy. Posting line on machine is always visible to the operator and any error made may be seen instantly. It is possible to enter as many amounts as desired in the same column by touching the V-bar which automatically causes the machine to space vertically while remaining in the same column. A hold operation of the V-bar causes the machine to space vertically and return to any previous column. Accounts receivable, accounts payable, payroll and stock records are among the many applications of the versatile 158 which also may be used as a regular adding-subtracting machine.

ELECTRONIC FILE

W. S. Macdonald Co., 33 University Road, Cambridge 38, Mass., makes the Magnefile for permanently storing numerical data. It performs the arithmetic necessary to alter the stored data and prints stored information as required.



Machine has the capacity for 4,000 individual balances grouped into 40 subtotals. Using a simple keyboard, operator can add to, subtract from or print any balance figure in two seconds. Machine can list its entire contents in two hours. It is used to keep perpetual inventory

records of fast-moving items and to develop statistical information from a high volume of individual transactions. No skill is needed to operate it. Comprehensive literature from above address.

INTERNAL SIGNALING SYSTEM

Automatic Electric Co., 1033 W. Van Buren St., Chicago 7, Ill., offers a free 6-page, illustrated brochure, "The P-A-X Code Call Service," which describes how executives and key employees can be quickly reached anywhere in the plant or office by means of a special signaling device that is part of an internal business telephone system.

OFFSET DUPLICATOR ADDRESS-PLATE EMBOSSER

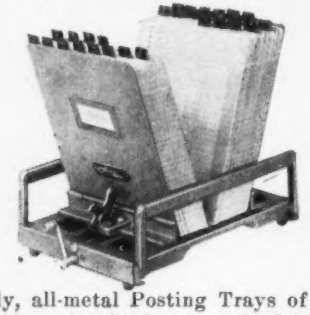
Addressograph-Multigraph Corp., 1200 Babbit Road, Cleveland 17, Ohio, announces the addition of two new models:

a moderately priced Multilith offset duplicator and a specially designed Graphotype that simplifies and speeds embossing of Addressograph plates. The Multilith Model 750 offers an efficient low-cost means of producing different reproduction jobs. It features Simflo Control which simplifies operation, assures uniform quality in copies and minimizes operator training time. Other features permit a wide choice of paper and card stocks, duplicating on both sides of the paper and an operating speed that will produce more than 5000 permanent copies an hour.

Style VV, B, E, P, Q and Speedaumat plates can be embossed on the new Graphotype. Anyone familiar with a typewriter keyboard can operate it. Special mechanical plate handling features allow handling 250 plates at a time. Operator's hands do not touch the Addressograph plates after the magazine is loaded until embossed plates are taken from the receiving hopper. Errors can be corrected simply by backspacing and re-embossing.

POSTING TRAY

Charles R. Hadley Co., 330 N. Los Angeles St., Los Angeles 12, Calif., makes

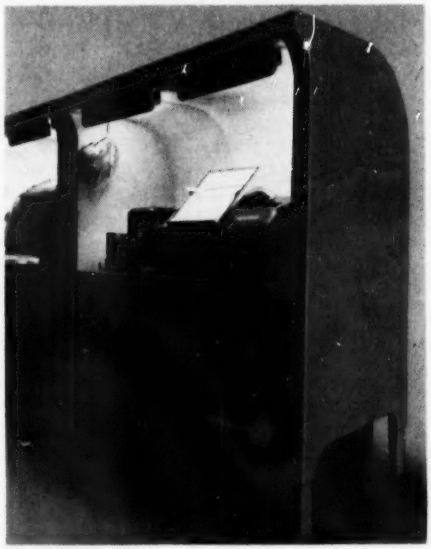


sturdy, all-metal Posting Trays of extra large capacity in four standard lengths. Tray's quick, positive action provides

three reference positions. Models will take 22 standard sheet sizes and sheets can be offset to right or left. This tray combines the functions of a posting tray and reference binder in one unit, allows full visibility to both sides of sheets and enables workers to do more work in less time and with less effort. Complete information from above address.

TELETYPE SOUND CONTROL

Gates Associates, 44 Commercial St., Rochester 14, N. Y., makes Sof-Tone acoustical cabinets for teletypes and teletypesetters. All sharp, metallic pitch noise is absorbed and remaining sound volume is cut 50% for the machine operator and persons in surrounding area.



This eliminates headaches and nervous tension. The cabinets provide perfect indirect lighting on the entire working area to eliminate eyestrain. This allows the operator to concentrate on the copy and reduces errors. It also assures privacy of the copy or records being transmitted. Machines can be located anywhere without disturbing other workers. Sof-Tone acoustical cabinets are sold on the basis that promised results must be achieved.

POSITIVE OFFSET PLATE

Azoplate Corp., Summit, N. J., makes Enco Presensitized Positive Working Aluminum Plates which expose to a positive rather than a negative, yet print a positive image on offset duplicators. The plate is simple to prepare from positive originals like copy on translucent or transparent paper. Where film positives are now used, it eliminates making

negatives from the positives. Advantages of this plate include high printing quality because of its fine grain and thin coating, low cost; no need for equipment like whirlers, sinks, running water or expensive coating solutions; exposure unaffected by temperature or humidity, fast preparation with the equivalent of a deep-etched plate in five minutes without special skill. Plates can be stored for extended periods before and after use.

PHOTOCOPIER FOR OFFSET

Copy-Craft, Inc., Dept. O-4, 105 Chambers St., New York 7, N. Y., announces that its Photorapid can be used with positive acting presentized plates. When the original to be copied is either opaque, double-sided or bound in a book, Photorapid can produce a transparent copy which makes a suitable positive for burning-in on this new type offset plate. With this process, the entire time from original to offset press can be reduced to six minutes or less.

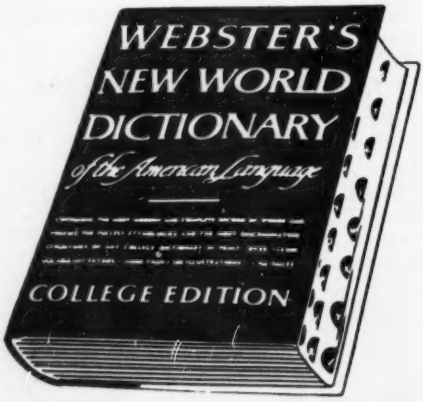
PHOTOCOPY CABINET

American Photocopy Equipment Co., Dept. O-1, 1932 W. Peterson, Chicago 26, Ill., makes an all-steel photocopy cabinet which, combined with the Auto-Stat photocopier, offers a complete, compact photocopy department with ample shelf space for paper and all other necessary supplies. The Lite-Guard Cabinet has doors and top which open to form a light shield with a vinyl plastic draw curtain

front, preventing accidental exposure of light sensitive photopaper even under the most extreme lighting conditions. It insures perfect photocopies in any office under any light conditions, including bright fluorescent lighting or in front of sunlit windows. Wherever space is at a premium, the compact Lite-Guard Cabinet saves room. Closed it measures 78" high, 36" wide, 18" deep and opens to a depth of 36". It gives ample working room in 1 sq. yd. and is attractive in appearance with a neutral gray finish to harmonize with office furniture. Priced at $69.50.

DESK DICTIONARY

World Publishing Co., Cleveland 2, Ohio, publishes "Webster's New World Dictionary" in the College Edition which is convenient for desk use. The publisher states it is the most complete



American desk dictionary, having 1,760 pages with 142,000 entries. Each word definition has been brought up-to-date according to present-day usage, and there are more complete entymologies, descriptive synonyms, idioms, scientific and business terms, etc. The work has 1,220 illustrations and it has been approved by universities throughout the country. Lists at $5 in cloth binding, $6 with thumb index. A deluxe edition in gold decorated leather with thumb index, gift boxed, is $12.50. Dealers should write above address for liberal discounts on quantities.

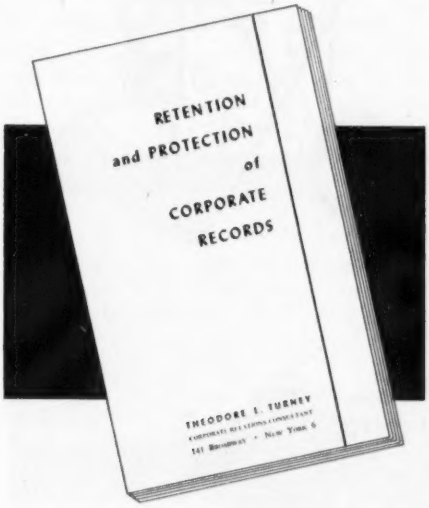
PUNCHED CARD TRANSMITTER

International Business Machines Corp., Dept. OF, 590 Madison Ave., New York 22, N. Y., makes a punched card transmitter that utilizes telephone and telegraph lines to link card transmitting and receiving units for transmission of accounting data from decentralized branch offices and plants to any central point. The same IBM transceiver unit is used for transmitting and receiving on a fully automatic basis. It reads data recorded in punched cards and transmits

series of beep sounds representing different holes in the card. These sounds actuate punching mechanism at the distant receiver which simultaneously creates exact duplicates of the cards being transmitted. The new cards are immediately available for accounting machine and computer processing. Each hole transmitted and received is checked automatically. A signal will echo back when a card is punched correctly to allow the transmitter to proceed automatically with the next card. Telephone lines allow 16 card columns of data to be transmitted and received every second and four separate transmittals can be sent simultaneously over one wire. Over telegraph lines, one transmission at a time can take place and transmitting speed is six columns a second.

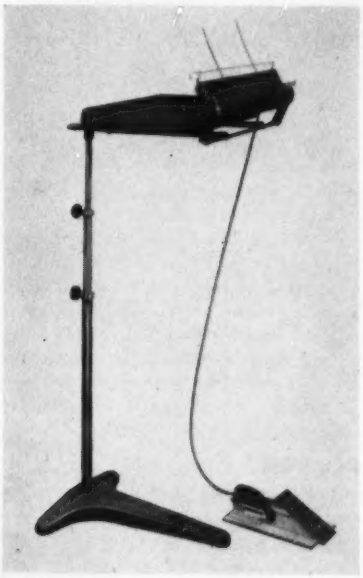
RECORDS RETENTION REPORT

Theodore L. Turney, 141 Broadway, New York 6, N. Y., has published a report titled, "Retention and Protection of Corporate Records," which covers the retention and protection schedules for 67 principal records as practiced by 70 of the country's leading corporations. The report tabulates the records procedures by industries for easy comparison and it allows the user to compare his own company practices with that of the country's largest firms. Names of firms are not disclosed but each type of record is listed and subdivided by industries. The complete report costs $100. A folder showing the report's contents, sample page and names of its users can be had free from above address.



PEDESTAL COPYHOLDER

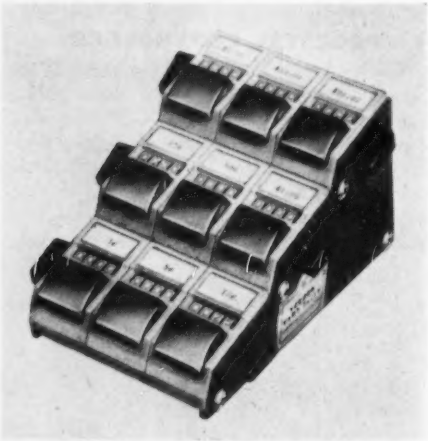
Pres-To-Line Corp. of America, 2339 Cotner Ave., Los Angeles 64, Calif., makes the Pres-To-Line BK-52 Pedestal Copyholder for use with accounting and key punch machines. It is equipped with a treadle with which the operator can advance the copy while her hands are free to operate machine or handle forms.



Copy is held directly at operator's eye level since height can be adjusted from 30″ to 60″. Pedestal stands behind machine for natural, forward reading. Copyholder is easily portable for use anywhere in the office and is made in 14″, 18″, 24″, 28″ and 32″ widths.

MULTIPLE COUNTERS

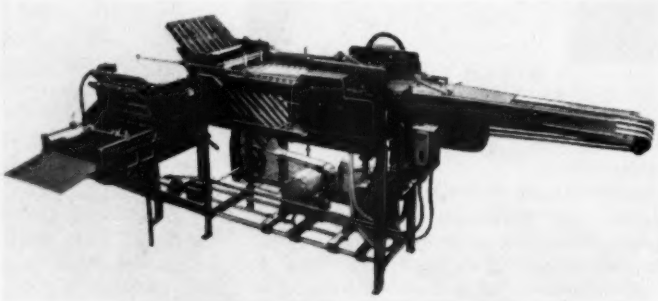
Veeder-Root, Inc., Hartford 2, Conn., makes Vary-Tally multiple-unit reset counters in any of 66 combinations, up to 6 banks high and 12 units wide, with a minimum of 2 units wide, arranged compactly on stands in tiers. Fingertip pressure on the front lever of a unit registers each count from 1 to 9999. A



reset knob instantly returns all counters in any tier to zero with one complete turn of the reset shaft. Name, color, denomination, quality or size, etc., of the item to be counted is inserted in a panel over the reading line on each Vary-Tally. Features include no-glare, easy readability even from an angle, portability, no obscuring of the figures by the operator's fingers and rugged construction. Literature from above address.

FOLDER

Dexter Folder Co., Pearl River, N. Y., makes the Model Cleveland AT Folder which will produce four folds in the parallel section and four in the right angle section. It takes sheets from 5" x 6" to 18" x 24". Rated speed is 9,600 an hour for the 18" x 24" sheet (11,600 an hour for a 14" x 20" sheet) but average hourly production is usually 70-80% higher. Machine is easy to adjust and will hold adjustment for long runs. It has great flexibility for its size and cost; will handle a wide variety of impositions including the over-and-over fold. An illustrated folder which describes the machine and its work can be had free from above address.



MACHINE TRUCK

Federal Cash Register Co., P. O. Box 2265-K, Kansas City, Mo., makes a Self-Balanced 2-Wheel Folding Shelf Truck

for carrying office machines. The truck can be used as a table to hold a machine on its padded 18½" x 19½" top and can

be had with 2-way electrical outlet for servicing or demonstrating machines. It fits into a car trunk and, with it, one man can handle heavy machines. Truck collapses for convenient storage. This company also makes two other folding machine trucks. Literature on all models from above address.

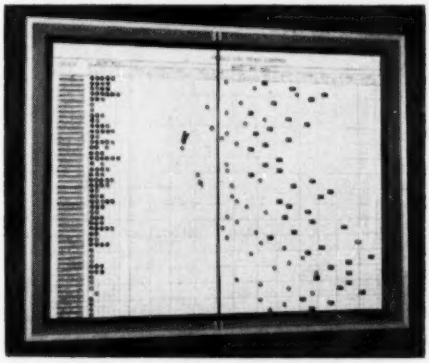
MOISTENER

Bernay Products Co., 412 S. Wells St., Chicago 7, Ill., makes the Moistix Envelope Moistener for moistening envelopes, stamps, labels, etc. It provides an

even flow and does not dry out when not in use. It will not leak in any position, keeps hand dry and has no messy parts to clean. Display carton has 12 individually boxed moisteners which retail at 98c each.

VISUAL CONTROL BOARDS

Maggie Magnetic, Inc., 40 East 32nd St., New York 16, N. Y., makes a line of visual control boards for all purposes. Instead of pegs, holes, slots or pins, the



indicators are held to the steel-backed board by powerful little permanent magnets. Any background sheet can be used, like graph paper, map, floorplan, etc. A wide variety of magnetic indicators are available in different shapes and colors to produce visual aids, control systems, office and plant layouts, control maps, etc. An illustrated booklet showing the many different parts and combinations available, together with price list, is free from above address.

ADDRESSING MACHINE

Weber Addressing Machine Co., 200 W. Central Road, Mt. Prospect, Ill., makes Model A-3 automatic spirit addressing machine for economically handling large mailings. It will address 2,000 pieces an hour, has automatic name advancer that positions each impression and an ejector which delivers addressed

pieces into a receiving tray. Transparent pressure bar allows operator to see each name and address as it is printed. Machine will address pieces from an airmail envelope to a 1"-thick catalog. Uses no metal plates, stencils, ribbon or ink. Machine can be adapted to address from record cards or other forms. Simple to operate, the Model A-3 with supply kit for 500-name list costs $114.22 including excise tax. Additional supplies cost less than ¾c per name and address. Illustrated literature from above address.

PHOTOCOPIER

Cormac Industries, Inc., 41 East 42nd St., New York 17, N. Y., makes a smaller, lighter photocopier called the Compact. This simplified, portable unit is small enough to be kept conveniently on the corner of an executive's desk or typewriter stand, to produce the extra copies constantly needed, inexpensively, in a few seconds. It eliminates retyping, proofreading and correcting, or sending out for commercial reproduction. Besides

copying any written or typed material, the Compact reproduces perfect facsimiles of sketches, plans or halftones. Originals in any color will reproduce in black-and-white, can be folded or written on, and are legally acceptable. No experience is required to operate the self-contained Compact. Completely automatic and all-electric, it measures 10″ x 18″ x 10″, weighs 18 lbs. It's attractively finished in non-corrosive gray plastic with stainless steel parts; operates on 110 volts and is entirely manufactured in the U.S. to retail at $359 complete.

FLUORESCENT CHECKS

Radiant Color Co., 830 Isabella St., Oakland 7, Calif., makes Velva-Glo fluorescent papers in 8 brilliant colors which can be used for bank checks. When used for checks, fluorescent papers have high attention value and serve as promotional matter for the payer. Checks on fluorescent papers cannot be successfully altered because ordinary erasures are easily detected and ultra violet light will disclose expert tampering. A sample swatch book and samples of checks on Velvo-Glo paper can be had free from above address.

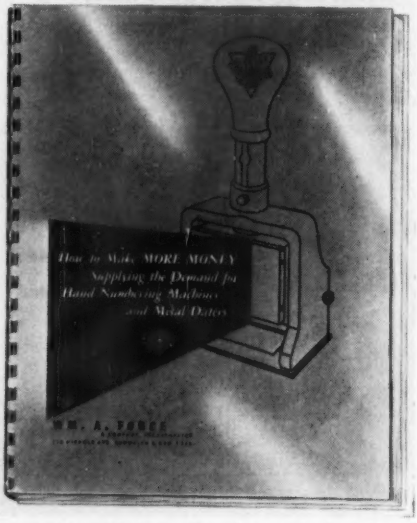
PEN-PENCIL

Norma Pencil Corp., 137 West 14th St., New York 11, N. Y., makes the Norma 4-in-One Combination Pen-Pencil which serves as three different colored pencils

and a smoothly writing pen. It contains eraser and reserve leads, works with the flawless precision of Norma Multikolor pencils, is chrome finished and sells for $5.95 including tax. Ink refill for the pen is 49c. Literature from above address.

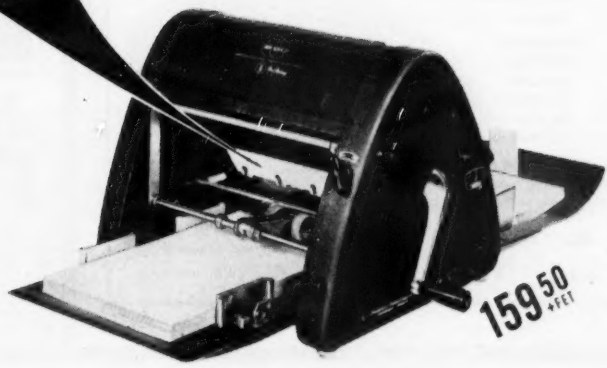
NUMBERING MACHINE DATA

Wm. A. Force & Co., 216 Nichols Ave., Brooklyn 8, N. Y., offers dealers a free book which tells how to make more



money supplying the demand for hand numbering machines and metal daters. It graphically analyzes the market for

no drum
no ink pad



159.50 +FET

use the revolutionary mimeograph

Operating on an entirely new mimeograph principle, the BDC is the first hand operated mimeograph that is really clean. There is no drum to ink, no pad to change. The ink is a heavy paste that does not and cannot leak. The machine is always clean—but better yet, so is the user! The BDC is designed like a printing press, and with it any office worker turns out copies that are printing press quality. Get the whole story on the first basic mimeograph improvement in 25 years. Write for complete information.

BDC

Bohn Duplicator Corporation, 444 Fourth Ave., New York 16, N. Y.

ODHNER . . . ads like this will reach millions in 1954!

Odhner gives you the 4 things you want most in an adding machine!

1. **LESS NOISE**—Rotary drive stops vibration. Rubber cushioning deadens sound.
2. **MORE SPEED**—10-key built-for-touch keyboard.
3. **EASIER TO OPERATE**—Electrically engineered. Double-duty keys cut waste motion.
4. **EASIER TO SERVICE**—Built in sections. You can count on an Odhner.

By the makers of famous FACIT 10-key touch calculator.

FACIT INC. Dept. | 500 Fifth Avenue, New York 36, N. Y. 114 Sansome Street, San Francisco 4

SOLD AND SERVICED THROUGHOUT THE WORLD

TIME
The Weekly Newsmagazine

U.S. News & World Report

Newsweek

The magazines top executives read—TIME, NEWSWEEK, U. S. NEWS & WORLD REPORT—will carry Odhner advertisements like this during 1954. These magazines have a combined circulation of 3,248,118 per issue—tens of thousands of important business machine customers. This support promises expanding sales for Odhner dealers all over the U.S.A. Will you share in the profits? A few Odhner dealerships are still available to qualified applicants.

Write Odhner Div.,
Dept. O, FACIT INC.
500 Fifth Ave., New York 36, N. Y., or
114 Sansome St., San Francisco, Calif.

You can count on
Odhner
Adding Machines

SOLD AND SERVICED THROUGHOUT THE WORLD

these products and describes the use of the Force Selector-Catalog and Selector Chart for selecting the right machine for each job. The chart, which can be displayed, shows at a glance the wide variety of machine impressions available; gives character dimensions in thousandths of an inch and by inch count. Dealer receives job analysis forms so that he can provide customers with expert systems advice on machine choice and use. Book has plastic binding and is attractively reproduced.

LONG TAPE DEAL

Minnesota Mining & Mfg. Co., St. Paul 6, Minn., announces a special long roll promotion through June 30, built around two deals, Deal V and Deal DS, which can be purchased either separately or together. Deal V consists of two deluxe

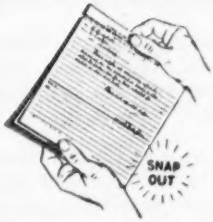
heavy-duty dispensers, and 12 rolls of ½" x 2,592" tape. The all-metal dispensers are finished in gray enamel, each weighs 4½ lbs. and accommodates tape up to 1" wide. Deal DS includes two semi-automatic Scotch Model 92 definite length dispensers, and 12 ½" x 2,592" rolls of tape. Dispensers issue predetermined 1" to 4" lengths of tape at the

PRINTERS • STATIONERS • DEALERS

WRITE TODAY FOR NEW PRICE LISTS

CUSTOM & STANDARD
ONE TIME CARBON-INTERLEAVED
BUSINESS FORMS

THE MODERN WAY TO MAKE
CARBON COPIES OF LETTERS, ETC.



INTEROFFICE MEMOS
TO SPEED INQUIRIES & ANSWERS

ORDER NOW:
1954 4 PART W-2's
5M @ $13.50 M NET

NATIONAL LITHO FORMS CO.
18423 EUCLID AVE., CLEVELAND 12, OHIO

Filmotype

no rhyme...

but **5**

sound reasons

why **FILMOTYPE**

means dollars and cents

to you!

1 Rapidly becoming a standard in business firms everywhere, Filmotype produces both professional quality hand lettering and type . . . provides your office with a complete hand lettering and type-setting department.

2 The exact style of type you require for any purpose—always! Choose from a selection of more than 700 faces!

3 Filmotype's versatility is coupled with efficiency. This electrically actuated unit is only slightly larger than a typewriter . . . an important consideration for any businessman!

4 Economical? By all means! Filmotype costs far less than regular type . . . never runs out. Too, consider the amazing savings in hand lettering.

5 Anyone can make proofs in minutes . . . after only ½ hour of instruction. Proofs are sharp, black, letterspaced just as you wish for perfect reproduction—at a cost of less than 5c a foot!

Write for complete details—today!

FILMOTYPE

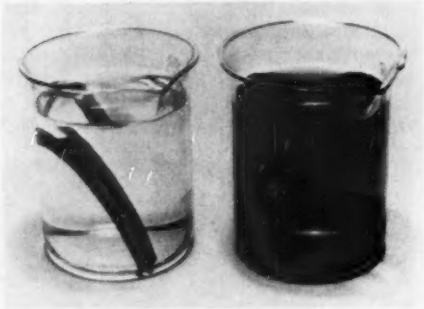
60 W. Superior — Chicago 10, Ill.
4 W. 40th. Street — New York 18, N.Y.

Filmotype

touch of a hand lever (longer lengths by depressing the lever repeatedly). Each dispenser weighs 6 lbs. and can be reloaded in a matter of seconds.

SPIRIT MASTER UNIT

Columbia Ribbon & Carbon Mfg. Co., 604 Herb Hill Road, Glen Cove, N. Y., makes the Commander Supercoated Ready-Master Unit for long runs. It contains no water-soluble dyes to stain hands, clothing, machines or equipment with hard-to-remove purple hectograph dye. Proof of the cleanliness of Com-



mander Ready-Master Units can be seen with two beakers of water. The one on the left contains a piece from the Commander Ready-Master Unit and the water remains clean enough to drink. The beaker on the right holds a piece of conventional hectograph unit that has completely contaminated the water. Commander Supercoated Ready-Master Units are made in all sizes and forms.

INK MANUAL

William Recht Co., Inc., 50 Church St., New York 7, N. Y., offers a 56-page pocket manual, "Using Ink," which contains a wealth of helpful information for pressmen and operators of letterpress, offset and die stamping equipment. The booklet contains a comprehensive index of inking difficulties for quick trouble-shooting. The method of detection, reason and remedy for each type of trouble are given. Write above address for a free copy of this handy pocket manual.

NOW...1 or 101 copies

Quickly, Easily with NATIONAL'S New Translucent RECORD FORMS!

In 1952 National brought you pads of translucent analysis sheets—making countless duplications possible by Ozalid, Bruning and other direct reproduction equipment. These sheets scored a big hit! NOW . . . National is first in the field with eight record forms (four shown) for pencil, ink and typewritten reproduction.

EIGHT NEW FORMS • Inventory • Order and Invoice • Comparative Sales Record • Inter Office Memorandum • U. S. Outline Map • 8 x 8 inch Quad • Form Layout Sheets (Pica spacing or Elite spacing). *Ask your National Blank Book Dealer for them.*

NATIONAL BLANK BOOK COMPANY

Holyoke, Mass. New York Chicago San Francisco Atlanta

NATIONAL

MAKERS OF STOCK ACCOUNTING FORMS AND EQUIPMENT • LOOSE LEAF, BOUND BOOK AND VISIBLE

TRADEMARK REGISTERED

Jac-a-desk

The Amazing Desk Stabilizer

Makes Typing Easier, Faster

Typewriters were built to operate on a solid, firm base; any wobble or springiness upsets its precise mechanism. Many typewriter platforms are worn and wobbly causing skipping, piling, poor touch and action . . . in many instances, immediately corrected by JAC-A-DESK. JAC-A-DESK expands from floor to platform, automatically wedge-locking into a support as firm and solid as the floor itself. Typists love JAC-A-DESK because it makes typing less tiring, neater, easier . . . office managers praise its economical efficiency.

JAC-A-DESK expands from 16" to 30" —high enough to support standard height desk leaves.

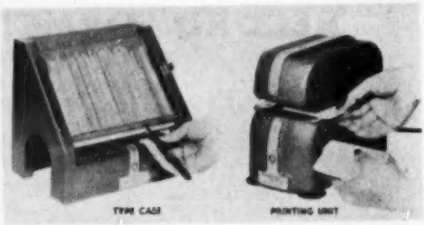
Up in a jiffy —locks automatically. Non - snag, satin-like finish. No protruding locks or handles.

Sure grip rubber ends. Easy to store.

GONCO MANUFACTURING COMPANY
1259 So. La Brea Avenue, Los Angeles 19, California
Distributed by all Ames Supply and Shipman-Ward Branches. IN CANADA: Underwood Ltd., 135 Victoria St., Toronto and United Stationery Company Ltd., Toronto.

TAG IMPRINTER

American Tag Co., 151 Cortlandt St., Belleville 9, N. J., announces the Jiffy Print machine for imprinting tags, labels, forms, etc. The user sets his own metal type from a small indexed rack holding 42 rows of characters. Type is not touched by the hands and the average text is set in two minutes. Complete line slugs also can be used. Type is inexpensive, a hundred characters in a tube for a few cents.



The imprinting machine automatically prints as it is hand fed. One thousand tags an hour can be imprinted and users report as high as 10,000 impressions a day with one machine. Machine prints through a ribbon which advances with each impression and automatically reverses. Ribbon can be any color, or 2-color. Over 200 characters on 11 lines can be imprinted at one time. Trademarks, signatures or other cuts can be included. Numbering wheels can be added and an automatic counter will count impressions. A guide allows exact positioning of imprint. Illustrated literature and sample impression from above address.

DESK ACCESSORIES

Bert M. Morris Co., 8651 W. Third St., Los Angeles 48, Calif., offers their illustrated 1954 catalog of desk-top equipment. Write above address for a free copy.

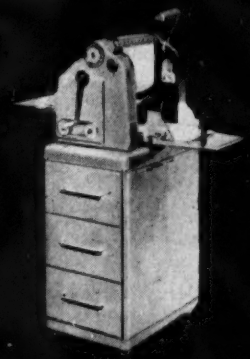
FORMS SHIPPING PLAN

Cullom & Ghertner Co., 600 21st Ave. North, Nashville 4, Tenn., offers a free brochure describing the C & G Plan for regulated shipments of printed forms including their Snap-I-Set carbon-inter-

Compare... and get more for your duplicating dollar!

Before you buy any duplicator check it against this chart

	GESTETNER 260	OTHER
Always ready for instant use?	YES	
No pads to change—no ink leakage?	YES	
Continuous, automatic inking system?	YES	
Quick, clean color change?	YES	
Edge to edge printing?	YES	
Pasie ink for cleanliness—sharper copy?	YES	
Variable speed and position adjustments?	YES	
All controls on operator's side?	YES	



For simple, clean, low-cost operation . . . there's nothing like a

Gestetner

Duplicating at its finest . . . since 1881

By any standard of comparison—whether it be original cost, simplicity of operation, cleanliness or reproduction efficiency—the Gestetner 260 is today's best duplicator buy. Compare, and see for yourself.

Ask for your copy of this useful booklet . . . and for the name of your nearest Gestetner Dealer

SALES AND SERVICE FROM COAST TO COAST

Gestetner Duplicator Corp., Dept. 26,
50 McLean Avenue, Yonkers 5, N. Y.
Gentlemen: Please send me a copy of your new booklet "30 Ways To Get The Most From Your Duplicating Equipment."

NAME.....

COMPANY.....

ADDRESS.....

CITY, ZONE, STATE.....

At last I've found a REAL pencil sharpener!

It's a beauty! I have it sitting right on my desk where it's handy. You just put your pencil in at the natural writing angle and zing . . . you've got a perfect pencil point. It's completely automatic. My boss likes it because it saves time and pencils.

Every office needs an

Electro-Pointer

AUTOMATIC ELECTRIC PENCIL SHARPENER

Proven thru 13 years of satisfactory service.

CALL YOUR STATIONER OR WRITE

STILE-CRAFT

Manufacturers **INC.**

1825 MACKLIND AVE. • ST. LOUIS 10, MO.

leaved unit sets. Payment is made only for that portion of an order which is shipped to the user and broken shipments can be made to any point. A 3-months' supply of an order is kept on hand by C & G for immediate shipment. Write above address for free folder describing all plan's features.

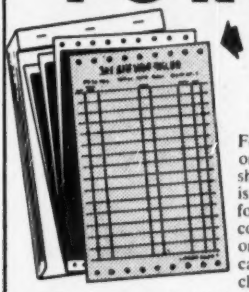
LARGE MASTER FILE

Mim-e-o Stencil Files Co., 1214-21 W. Chestnut St., Chicago 22, Ill., makes a large capacity, heavy gauge, all-steel file which stores 500 offset masters and stencils, including aluminum, paper composition and zinc masters, Multilith masters Nos. 1250, 75, 80 and 2066, and Davidson masters Nos. 241, 252 and 233. Every

possible consideration for exact reproduction of re-runs has been incorporated into this file. It has patented spring clip hangers, each filing two masters vertically to prevent pressure or scratching of stencils or masters. Multilith masters No. 2066 are filed sideways to protect the serrated edges. Built-in ventilation eliminates corrosion and nickel plated hanger tracks provide easy sliding of hangers. X-ray and blueprint plates and film also may be filed. The file is mounted on ball bearing swivel casters to combine large capacity with easy portability. Of streamlined design, it is finished in gray

REPLIMAT ONE WRITE SYSTEM

SALES & ORDER FORMS



TOP SHEET OR SECOND SHEET IS YOUR PRINTING PLATE

Form is completed in one writing—and top sheet or second sheet is your printing plate for running off as many copies as you require on your offset duplicator or Ozalid machine.

Only Replimat One-Write System gives you these exclusive advantages:

1. *Can be folded for mailing*
2. *No slip sheeting necessary. Where master printing plate sheet is in second position, no slip sheeting is necessary since the carbon cannot affect or tone the Replimat plate.*
3. *Resists fingerprints*
4. *Eliminates etching*
5. *2-year shelf life guaranteed*
6. *Replimat master can be used on offset duplicator or Ozalid machine*

We guarantee to reduce your costs

The Replimat One-Write System is the ideal money-saver for food, grocery, liquor and package goods order forms; inventory, replacement and spare parts sheets; export-import forms etc.

We also produce marginally punched continuous forms, teletype rolls and all business forms.

We will design an operating system to suit your needs.

CALL FOR REPRESENTATIVE TODAY!

REPLICA PRODUCTS CORPORATION

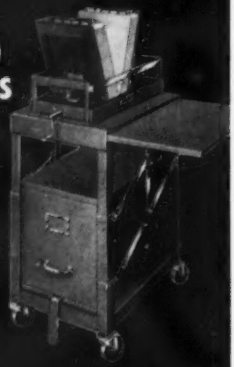
Manufacturers of Offset Duplicating Supplies

154 NASSAU STREET NEW YORK 38, N. Y.

Le Febure

M-K ADJUSTO TRAY-BINDERS and Hi-Lo STANDS

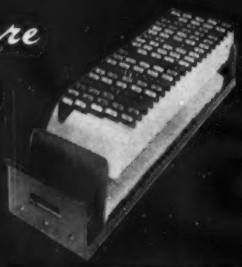
Easy adjustable stands made to fit one or more tray-binders — EXACTLY!



Le Febure

SORTERS

SAVE TIME
SAVE WORK
SAVE SPACE



STEEL BANK and OFFICE UNITS

TO FIT YOUR NEEDS AND SPACE.

Tray housing, counter units, teller units, accounting machine desks, savings tubs, money buses, double capacity files and cycle billing equipment insulated if required.

TRAINED REPRESENTATIVES IN MOST PRINCIPAL CITIES

Complete Line of Tray-Binders, Stands, Record Handling and Housing Equipment.

Le Febure CORPORATION, CEDAR RAPIDS, IOWA

baked enamel. For full information, ask for literature on Offset Master File No. 2066-R-SCH.

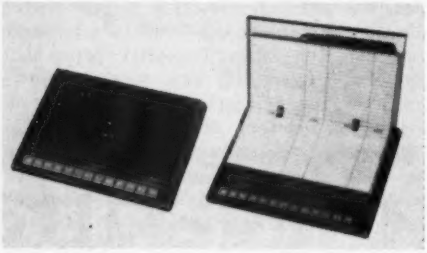
PAPER-HANDLING COMPOUND

Lee Products Co., 2736-38 Lyndale Ave. So., Minneapolis 8, Minn., makes Sortkwik, a handy, fingertip preparation that expedites paper handling. Quickly applied, it leaves a greaseless, stainless, tacky film on the fingertips making even the most slippery papers easy to handle.

It is a pleasant-to-use preparation; replaces rubber fingers and unsanitary sponges. Sortkwik is completely harmless, washes off readily and is recommended for every operation requiring extensive paper handling such as sorting, collating, filing, counting, etc. Packaged in a flat, unbreakable plastic container, retailing for 50c each.

LIST FINDER

Zephyr American Corp., 95 Morton St., New York 14, N. Y., makes the Autodex Model M-300 List Finder with 6½" x 3½" pages for writing without cramping.



One push of an alphabetical button instantly opens it to the correct page. Construction is all-steel for lifetime use. Individual card-pages can be removed or

No EGYPTIANS Required

Ever have work from your office duplicators come out looking like early hieroglyphics? . . . filled letters, smudges, blots? The culprit may be just plain lint.

You see, lint from some papers is picked up by the blanket or plate . . . then takes on ink . . . and leaves a dot or line on the finished copy. The more lint, the more unexpected dots or lines.

The remedy is as simple as the cause. Use Eastern's lint-free duplicating papers. Special surfacing and sizing built into these fine papers eliminates the possibility of a "linty" surface . . . assures clean, clear impressions on every job.

For top quality work on stencil, spirit or offset duplicators . . . for papers that look well, print well and permit fast, trouble-free operation, use Eastern's Office Papers:

ATLANTIC BOND, ATLANTIC MIMEO BOND, ATLANTIC OPAQUE, ATLANTIC DUPLICATOR, MANIFEST MIMEO BOND, MANIFEST MIMEO, and MANIFEST DUPLICATOR.

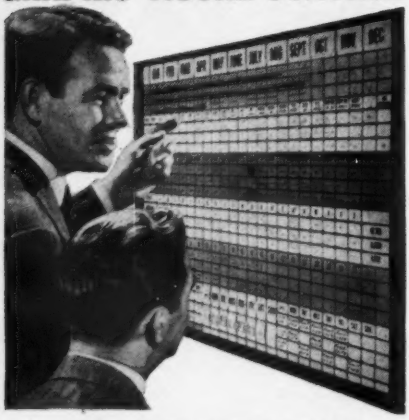
For sample packets or sheets write or call.

use ATLANTIC BOND *Business* PAPER

EASTERN

MADE BY EASTERN CORPORATION • BANGOR, MAINE

GRAPHIC VISUAL CONTROL



THE BOARDMASTER SYSTEM

★ Graphic Picture of Your Operations — Spotlighted by Color
★ Facts at a Glance — Saves Time, Money, Prevents Errors
★ Simple and Flexible. Write on Cards, Snap in Grooves
★ Made of Metal. Compact, Attractive. Over 40,000 in Use

Some Typical Applications
PRODUCTION • TRAFFIC • SALES
INVENTORY • SCHEDULING
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GRAPHIC SYSTEMS
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WHEN YOU BUY OFFICE FURNITURE
Specify Desks by **Imperial**

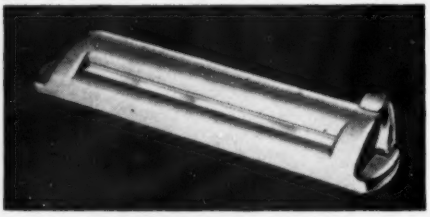
Imperial DESKS

ASK YOUR DEALER
Imperial
DESK CO.
Evansville, Indiana

inserted as necessary for typing, etc. Automagic mechanism is jam-proof and case is attractively finished in choice of walnut, oak or gray grain with scuff-proof bottom. Retails at $2.95.

ENVELOPE OPENER

Wilson Jones Co., 209 S. Jefferson St., Chicago 6, Ill., makes the Marvel Mail Opener which opens all envelopes up



to 12″ long with a light fingertip action and without damaging enclosures. The positive working lever recoils automatically. The Marvel Mail Opener has a lightweight aluminum case and all its working parts are hardened, plated steel for long life. Free illustrated folder from above address.

IN-AND-OUT BOARD

Acme Bulletin Co., 37 East 12th St., New York 3, N. Y., makes the No. 39 In-and-Out Board which is 20″ x 15″, chromium framed, and has ½″ changeable cellu-

	IN	OUT		IN	OUT
ABRAMS		X	NAMM	X	
ACKERMAN	X		NOBEL	X	
ADAMS		X	POULSEN	X	
BENTLEY	X				
BROWN MISS E	X		RATNER	X	
BROWN R	X		ROMMEL	X	
CLEMENS	X		SCOTT		X
DORNER	X		THOMAS		X
			TRUEMAN	X	
GEIER	X				
HOFFMAN	X		VALENTINE	X	
JACKEL	X		WILDER O N	X	
LAUDER		X	WILDER L A		X
MITCHEL MRS	X		WORTHINGTON	X	
MORTON	X		ZIMMER	X	

loid letters for up to 30 names. The in-and-out indicators are easily operated and this size board is $13. A 24″ x 15″ board for 45 names is $17 and one 20″ x 22″ for 48 names is $21. Illustrated cata-

UNITED AIR LINES

"Nationals save us 52% a year on our investment."—UNITED AIRLINES, Chicago

"Our National Accounting Machines saved us $23,000 in the first year of installation, a return of 52% on our investment. At the same time Accounts Receivable increased 50%, without causing us to add personnel or machines. And Nationals make month-end balancing easier, accounting records clearer, operator training simpler."

Rexford E. Bruno
Comptroller
United Airlines

Let a National representative show you how Nationals cut costs by doing up to ⅔ of the work automatically, and pay for themselves with the money they save.

*TRADE MARK REG. U. S. PAT. OFF.

National*
ACCOUNTING MACHINES
ADDING MACHINES · CASH REGISTERS

JOBS HANDLED — Accounts Receivable — Air Travel Plan Billing — Government Travel Billing — Accounts Payable — Passenger Refund Vouchers — Check Writing — Analysis of Air Freight Revenue

THE NATIONAL CASH REGISTER COMPANY, DAYTON 9, OHIO

THE NEW AJAX ELECTRIC QUICK-SET MACHINE

Designed for rapid change of numbers. Extremely reliable and positive in nature. Almost 2" of space available into which figure wheels, letter wheels, date wheels and barrel wheels can be inserted. Up to 15 wheels can be provided.

Locating guides and special platforms for proper registration on all kinds of business forms can be furnished.

Send for complete catalog on all types of timing, dating and numbering machines

AJAX TIME STAMP CO., INC.
MANUFACTURERS
368 BROADWAY
NEW YORK 13, N. Y.

log showing many kinds of interchangeable letter boards for all purposes can be had free from above address.

TAPE FACT-RECORDER

Remington Rand Inc., 315 Fourth Ave., New York 10, N. Y., makes the Unityper II, an integral component of Remington Rand's Univac electronic data processing system, for recording facts on magnetic tape. Processing alpha-numeric data on magnetic tape saves space, time and money. One reel of tape records more facts than 450 80 or 90-column punched cards. One operator can complete almost two full reels of tape in an average working day, changing tape in two minutes.

Since magnetic tape is re-usable, the Unityper II will automatically erase all previously recorded information prior to recording current data. Using a conventional electric typewriter keyboard, modified for fast operation, the Unityper II records data in code on the tape, simultaneously printing a proof-copy of the letters and numerals. An added bank of numeric keys permits faster typing of numeric data. Errors on the tape, either one character or a whole line at a time, can be automatically erased. Compact in size, the unit will fit on any standard typewriter desk, and is portable for use anywhere at the Univac location. Bulle-

Model 14
Copyflex Machine

Type Back Orders and Their Invoices?
...I'll Say Not!

Today many modern businesses are saving thousands of dollars and eliminating confusion and delay by not typing back orders and their invoices.

These businesses have installed Bruning Copyflex order-invoice systems especially tailored to meet their individual needs. Under such systems the original order is all that is required for back orders and their invoices as well as for the first shipment and its invoice.

Copyflex provides two separate methods for eliminating back order and invoice writing; by using reproducible copies of the original order or by providing multiple shipping and billing columns on the original form.

The result? Savings of thousands of expensive man-hours due to the elimination of unnecessary typing and of human errors.

What Copyflex Is

The basis of the Bruning Copyflex order-invoice systems is the Copyflex machine itself. This amazing machine turns out ready-to-use black on white copies of anything typed, written, printed or drawn on ordinary translucent paper. It does this without fuss, mess or bother —rapidly and economically.

If you are interested in the Bruning Copyflex order-invoice systems or if you have any problems involving the speedy, economical, accurate duplication of records, mail us the coupon below for free booklet.

BRUNING

Copies anything typed, written, printed or drawn on ordinary translucent paper in seconds. **Copyflex**

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4700 Montrose Avenue, Chicago 41, Ill., Dept. 205

Please send me free booklet on Copyflex and full particulars about how Copyflex solves any copying problems.

Name_____ Title_____

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"Smoothest sheet this side of coating!" . . . perfect for formal announcements, calling cards, distinctive correspondence.

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tin EL132, describing the new Remington Rand Unityper II with complete specifications is free from above address.

ELECTRIC-MACHINE STAND

Maso Steel Products, Dept. O, 53 W. Jackson Blvd., Chicago 4, Ill., makes the No. 2200-C Stand with steel top and two steel drop leaves attached level with the top or 4½" below. Extensive tests with most all modern electric typewriters, calculators and adding machines for strength, safety, rigidity, portability and operator comfort were passed with flying colors. The heavy gauge all steel top is available with or without four steel cups and two steel channels adjustable to fit most electric office machines. Top has wide radius corners and smoothly rounded

edges slightly raised to hold notes, pens, pencils and clips from rolling off when machine is operated or stand is being moved. Extra strength and safety are provided by two extra sturdy drop leaf arms for each leaf, strong rear leg brace and off-center brace at the elevating device, plus Maso's patented rigid leg bracket which permits the heavy gauge steel tubing of front and rear legs to be one continuous piece. Four rubber feet, one adjustable for uneven floors, and four rubber, top-bearing casters help absorb shock of electric operation and reduce operating noise and cost of machine maintenance. Tops are 18¼" x 19⅝", drop leaves 18¼" x 14¼", height 27". Each stand is finished in smooth, baked enamel in choice of office gray, green or brown. List price, $35.95, f.o.b. factory.

Heyer

has IT!

only $195 complete!

Plus Fed. Ex. Tax

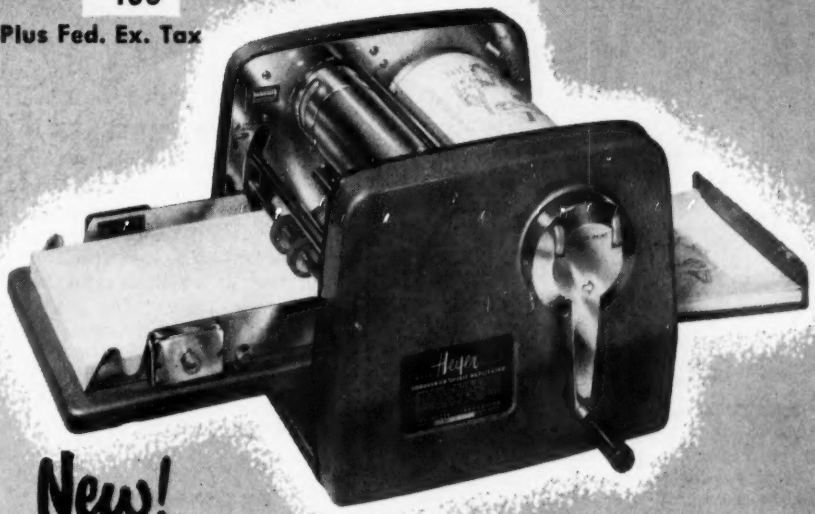
1 *Visible* fluid supply—32-oz. tank—no pump!

2 *Adjustable* pressure control—longer runs.

3 *Positive* master clamp—easy to operate!

4 *Automatic* centering of print—new raise-and-lower control.

5 *Eye-easy* reset counter—just where you want it.



New!

CONQUEROR SPIRIT DUPLICATOR

with ALL the features:

6 *Large capacity* rotary feed—150 copies per minute!

7 *Perfect* registration—prints any size up to 9" x 15".

PRICED FAR LOWER THAN ANY COMPARABLE MACHINE . . . ASK YOUR HEYER MAN, OR WRITE FOR COMPLETE INFORMATION.

THE Heyer CORPORATION • Established 1903

1850 South Kostner Avenue • Chicago 23, Illinois

New York, 3 Los Angeles, 26

See The Conquaror at the NOMA Convention, St. Louis, May 24-27, 1954.

Please mention THE OFFICE when making inquiry.

Specially Designed for YOUR Duplicator!

HALVERSON

DOUBLE DOOR

DUPLICATOR CABINET

MODEL 62-DD

$49.50

Slightly higher in Mountain and Western States.

Add this Halverson Cabinet to your office and you add practical quality! This dust-proof, roomy cabinet accommodates *all* your duplicator equipment. Loads of elbow room on the 29" x 19-½" mar-proof working top. Mounted on height-adjustable gliders, this handsome all-steel welded cabinet is designed for long life and smooth, easy operation. Attractively finished in Hammerloid grey baked enamel.

HALVERSON SPECIALTY SALES

1221 West Chestnut Street • Chicago 22, Illinois
Subsidiary of MIM-E-O STENCIL FILES CO.

MAIL THIS COUPON TODAY!

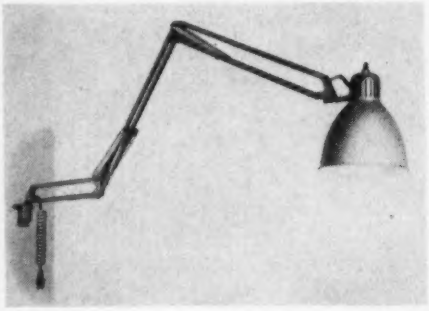
HALVERSON SPECIALTY SALES
1221 West Chestnut Street, Chicago 22, Ill.
Please send me complete details about the new HALVERSON Double Door Duplicator Cabinet 62-DD.
NAME .....
ORGANIZATION .....
ADDRESS .....
CITY ..... ZONE ... STATE .....

PAPER FASTENER

Lansdale Products Corp., Dept. M, Box 568, Lansdale, Pa., offers the Mosda Clipless Paper Fastener for securely fastening all types of papers by an instantaneous mechanical operation. It needs no refilling or supplies and is always ready for use. Its use does not add extra weight to the fastened sheets when they are mailed. The Mosda fastener weighs less than ½ lb., is made in England, finished in black enamel and retails at $4.95; prompt delivery.

EXTENSION LAMP

Luxo Lamp Co., 102 Columbus Ave., Tuckahoe, N. Y., announces the Model L-3 Luxo Lamp for wall mounting. The



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*NORTA THE ORIGINAL PLASTIC TYPE CLEANER

Free sample sent upon request write to

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COTTERMAN TUBULAR WELDED STEEL SAFETY LADDERS

For Filing Rooms, Stock Rooms, Vaults. Strong—Easy to Move, Easy to Climb.

Mounted on Swivel Brake Casters which allow the ladder to be rolled freely when no one is on it. When you step on the ladder the rubber cushioned legs rest on the floor and prevent rolling. Made in 7 heights—3 widths. Send for Circular 53-O and prices.

I. D. COTTERMAN, Mfr.
4535 N. Ravenswood Ave.
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I. A. DEHN, JR.

"The Pioneer Adding Machine Parts Man"

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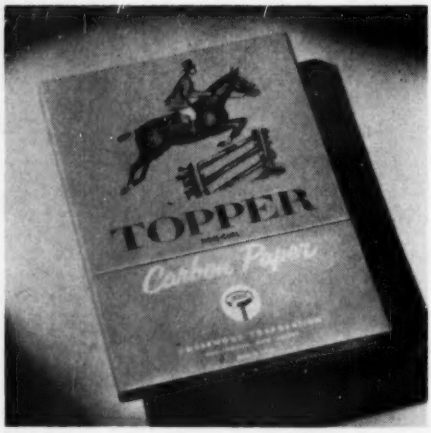
P. O. Box 144, Elmhurst Station, Oakland 3, Calif.

triple extension arm extends in a 60" radius and is instantly responsive to light concentration requirements. The same lamp may be used with different brackets for clamping to a desk or table top, or mounting with screws to a horizontal surface. Lamp weighs 4½ lbs., is finished in gray with nickeled steel springs and bears the Underwriters Laboratories label. Literature from above address.

CARBON PAPER

Underwood Corp., 1 Park Ave., New York 16, N. Y., makes a plastic back carbon paper designed for easier handling and available in three correspondence weights with five degrees of inking. Developed at the company's Burlington Works laboratory, Burlington, N. J., the field-tested carbon paper has six new features providing greater durability,



sharpness of write and erasing ease, according to the manufacturer. The hinged-type box, made to serve the secretary as a container for a current supply of used as well as new carbon paper, has been surface treated to reduce scuffing and soiling. The plastic backing minimizes curling, increases type blow resistance and eliminates slippage. Price of the higher quality Topper carbon paper, available in light, medium and standard weight, has not been increased.

MEET YOUR NEW *Secretary**

*THE Cormac "Compact"

10"x18"x10"
weighs 18 lbs.
copies up to 9"
wide, any length

. . . a *single-unit* photocopier!
The smallest, lightest, most efficient desk-top machine available anywhere! Fully automatic, requires no experience to operate!

Saves time and money, frees your *personal* secretary from the drudgery of typing any copies, gives perfect black-and-white facsimiles in seconds—for pennies.

Get all the facts about the spectacular new Compact and other Cormac models today! Write for your free copy of "MEET YOUR NEW SECRETARY," and name of nearest Cormac dealer.

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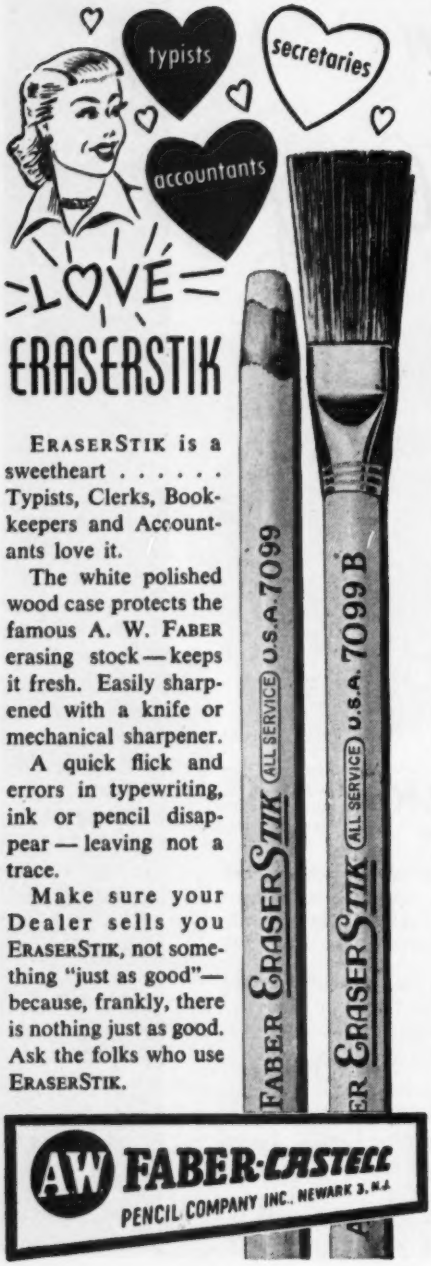


ERASERSTIK is a sweetheart . . . . . Typists, Clerks, Bookkeepers and Accountants love it.

The white polished wood case protects the famous A. W. FABER erasing stock — keeps it fresh. Easily sharpened with a knife or mechanical sharpener.

A quick flick and errors in typewriting, ink or pencil disappear — leaving not a trace.

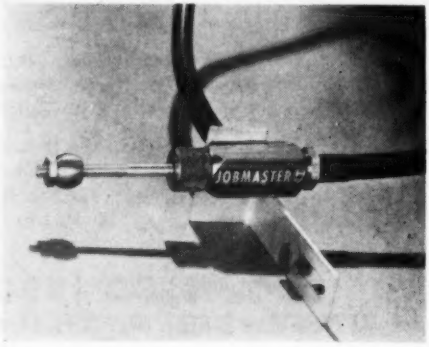
Make sure your Dealer sells you ERASERSTIK, not something "just as good"— because, frankly, there is nothing just as good. Ask the folks who use ERASERSTIK.

WORLD CLOCK

Kalex Corp., 305 East 46th St., New York 17, N. Y., makes the Kalex World Clock which indicates the correct time in 83 parts of the world. The clock is electrically driven, fully guaranteed, and made in a wall model ($97.50), desk model ($147) and the upright model illustrated ($294). Wall model has solid walnut case and other models have leather cases. Prices include excise tax. Illustrated literature from above address.

ANTI-OFFSET SPRAY VALVE

Jobmaster Co., 1016 First Ave. South, Seattle 4, Wash., makes a toggle action trip valve for any type of anti-offset spray on offset duplicators. Extremely long life with minimum upkeep is claimed



The front office should know about THIS!

It's not a new engagement ring or the latest office gossip that's causing all the excitement.

It's a demonstration of the new Todd Disburser—the machine that dates, protects and signs checks in one fast, efficient operation.

Leave it to the girls to recognize a real advance in office equipment. The Todd Disburser is smaller and lighter than a typewriter. It dates automatically. It shreds amount lines into check fibres with indelible ink. It controls and counts every signature.

To get all the facts about the time-saving, money-saving Todd Disburser—mail the coupon. Take the first step toward increased safety, improved efficiency and lower overhead for your company.

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Dept. O, Rochester 3, N. Y.

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SALES OFFICES IN PRINCIPAL CITIES

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due to the valve's all-metal, ball-check design, precision machining and use of stainless steel and brass for principal operating parts. Heart of the valve is a spring-held 5/16" stainless steel ball which in "closed" position fits snugly into a brass seat. A toggle-actuated stainless steel plunger pin depresses the bearing to open the valve and releases the toggle to close it. The valve will operate efficiently at any air pressure from 1 to 200 lbs. per square inch. Valve unit is available with fittings for either ¼" rubber hose, ⅛" pipe or ¼" copper tubing. A cadmium plated bracket allows a wide range of mounting positions. The Jobmaster Valve is $7.95 f.o.b. above. Descriptive folder available on request.

HAND CREAM

Heyer Corp., 1850 S. Kostner Ave., Chicago 23, Ill., makes a protective hand cream named Ghost Glove because it is both dry and invisible. The cream effectively protects the hands against ink,

ribbon or carbon stains, lacquers, greases and pigments of all sorts. Ghost Glove was originally developed to prevent hand soiling encountered by operators of duplicating equipment. One application of this carefully formulated cream will last several hours, giving assurance that

stains will not settle under nails or penetrate skin pores. Pleasantly scented, Ghost Glove is perfectly dry on application and leaves no greasy or slippery film to make work difficult. It washes off easily and completely, leaving user's hands clean and soft. Available in three sizes: 6-oz. jar at 45c; 1-gal. can at $4.50; 5-gal. can for $18.

RING BOOK SHEETS

Ennis Tag & Salesbook Co., Ennis, Texas, has added ring book sheets in all sizes, ruled and plain. This new line is attractively packaged in boxes covered with red embossed paper to match other boxed items in the Etsco lines. Dealers can obtain complete information from above address.

a quality
in letter
all heads
and fine
form paper

UNDERLINE YOUR WORDS WITH QUALITY AND CHARACTER

Have your letterheads printed on

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WESTON PAPERS · PROTECT YOUR RECORDS ·

Weston Bond is a fine rag content paper that instantly identifies you with quality and character. It's surprisingly low in cost — ideal for business forms, too. Your printer will vouch for it.

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The most wonderful thing you could do for a wonderful secretary!

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So you can really TRY IT —

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Prices and Samples
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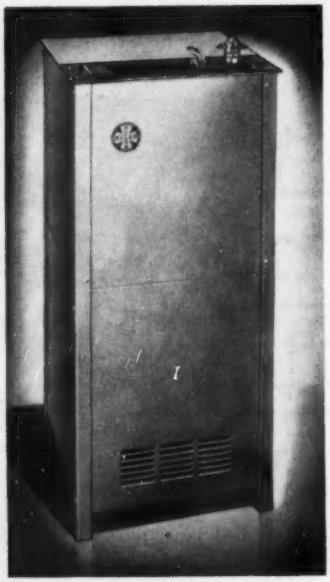
1640 Connecticut Avenue
Washington 9, D.C.

ICED WATER COOLER

Allen Filter Co., 25 S. St. Clair St., Toledo, Ohio, announces a pressure type iced water cooler that features low initial cost and low operating expense. The Allen cooler will serve many employees per cooler, is constructed of the finest



materials and will give many years of trouble-free service with no moving parts to go wrong or servicing required. Finished in brown or gray synthetic baked enamel, available in two sizes: 100 lb. ice capacity, $73.70; 50 lb. ice capacity, $63.80. Where water temperature may be variable, Allen coolers can be used with or without ice.

STORAGE CABINETS

Royal Metal Mfg. Co., 175 N. Michigan Ave., Chicago 1, Ill., offers free literature on their office storage and wardrobe cabinets, with photos and descriptive material on six cabinets and lockers, four available in two depths. It highlights 10 Royal features, including rounded corners on all cabinets, bonderized finish and economical KD shipping.

REGNA

TODAY'S BEST BUY IN ADDING MACHINES! $99.50

- FLEXIBLE SAFETY
- KEYBOARD PREVENTS ERRORS...FAST... QUIET...EASY TO OPERATE!

Built with the precision of a fine Swiss Watch! **Adding Counter Mechanism of the Regna is produced by renowned Swiss Watch factories, main assembly of Swedish quality steel . . . a combination that guarantees years of trouble-free service and reliable operation.**

The REGNA is so low-priced, large organizations can now profitably supply every department or desk with this time-saving assistant.

Models with 7 and 8 columns available at small additional cost.

GET FACTS ABOUT THE REGNA ADDING MACHINE NOW!

REGNA CASH REGISTER

REGNA CASH REGISTERS, Inc.
175 Fifth Avenue
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Gentlemen:
Please rush more information on the Regna Adding Machine and tell me how I can become a Regna dealer.
Name.....
Company.....
Address.....
City..... Zone..... State.....

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THE WORLD'S STURDIEST OFFICE MACHINE STANDS

From $34.50

To $66.00

FEATURES:

- 3" diameter casters prevent tip overs
- Drop leaf interchangeable
- Solid steel frame construction
- Simple elevating device
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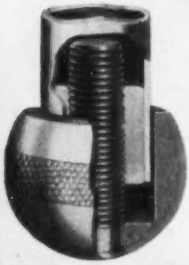


ADJUSTABLE BALL FOOT

Permits adjustment to very uneven floors. Always rigid.

GENERAL SPECIFICATIONS

Frame 24½" wide, 17¼" deep. Simple, positive elevating action. Constructed of 1" steel tubing. 25¼" between casters. Top 18" x 18", drop leaf 16" x 18". 3" diameter casters. 2 rubber feet, 2 ball feet.

Write Today for New Folder and Dealer Plan

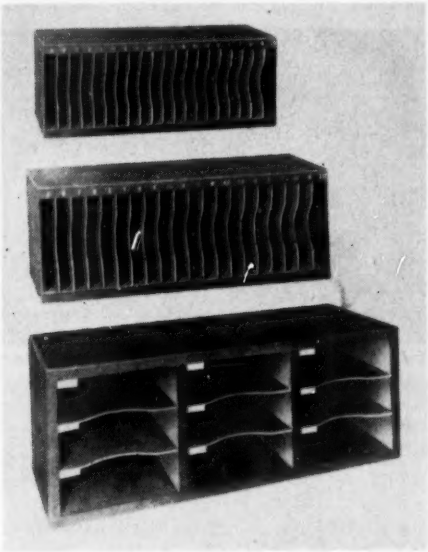
Tusco TRADE MARK REG.

TUBULAR SPECIALTY MFG. CO.

1940 Stanley Avenue Detroit 8, Michigan

SORTERS

Artistic Desk Pad & Novelty Co., 721 East 133rd St., New York 54, N. Y., makes Efficiency Sorters of walnut brown, heavy Spanish grain Masonite on wood frames with partitions of die-cut Tekwood. The No. 750 envelope size is 6" high, 17⅝" wide and 7" deep with alphabetical compartments, each 4⅜" high, ¾" wide, 6⅞" deep; lists at $7.50.



The No. 751 statement size is 8⅝" high, 22⅝" wide and 8½" deep with alphabetical compartments, each 7" high, 1" wide, and 8¼" deep; lists at $10. The No. 752 letter size is 11" high, 29" wide and 11⅜" deep with nine labeled compartments, each 3" high, 8-9/16" wide and 11⅛" deep, lists at $15. Bottoms of all units have felt pads. Literature from above address.

STAPLER

Bates Mfg. Co., Orange, N. J., supplies an adjustable gauge with their Mercury Long Reach Stapler which enables the user to staple at a predeter-

MR. OFFICE FURNITURE and EQUIPMENT DEALER

You'll get **NEW** Profit Ideas from the Convention Sessions.

You'll get **NEW** Sales Slants on how to sell office furnishings from the 216 Exhibits of leading lines.

NATIONAL OFFICE FURNITURE ASSOCIATION
8th Annual
CONVENTION and EXHIBIT
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CHICAGO
MAY 8, 9, 10, 11, 1954

MEMBER REGISTRATION (Complete with Round-up party, Luncheon and Banquet) $17.50.

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National Office Furniture Association
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HOW TO INCREASE YOUR PROFITS

...without increasing overhead

Printers, Dealers and Agents, RogersnaP's service of offering the best in carbon interleaved snapout business forms is available to you for your customers at a good profit, for yourself.

Stock forms ready for imprinting are also available in W-2 Forms and Envelopes - Bills of Lading - Purchase Orders - Voucher Checks - Repli - Memos - Salesman's Contact Reports.

It will pay you to investigate RogersnaP's service.

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mined distance from the top or side of sheets. Write above address for full information.

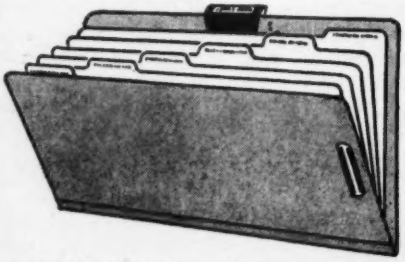
ORAL STENOGRAPHY

Talk, Inc., 261 Constitution Ave. N.W., Washington, D. C., announces the Stenomask for oral stenography. A stenographer can record over 250 words a minute on a dictating machine and her voice is not heard by the dictator or other persons nearby. Use of the Stenomask

requires no training or knowledge of stenography. Anyone can transcribe the recorded dictation in the usual manner. Oral stenography is becoming more widely accepted and used. It also offers a means by which almost anyone can take dictation in an emergency. The Stenomask is $135.20 with carrying case. Full information from above address.

MORTGAGE FILE FOLDER

Ulrich Planfiling Equipment Corp., 421 Murray Ave., Jamestown, N. Y., makes



mortgage file folders of heavy, durable red or gray pressboard with 1" or 2" cloth

Cleanest keys ever!
NEW!
BUD
TYPEWRITER TYPE CLEANER
NOT LIQUID-PLASTIC!
50¢ RETAIL
CLEANER
FASTER
HARMLESS
Bud ® TYPE CLEANER
Stationers write:
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ONLY REX-ROTARY D270 HAS
COMPLETELY AUTOMATIC
PRE-MEASURED INKING
It's exclusive with the revolutionary Rex-Rotary D270 . . . an ink cartridge is inserted, a dial set for the degree of inking, and the machine needs no further attention . . . all copies come out perfectly and uniformly printed . . . no more under- or over-inked copies . . . re-inking not necessary . . a bell announces when it's time to insert a new cartridge.
. . . with printing press precision, on large sheets or small cards, the beautiful steel grey Rex-Rotary D270 does a fast job in any color . . . better, cleaner and with more economy and flexibility than any other machine.
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Let me have more information about the new Rex-Rotary D270 duplicator and the name of my nearest distributor.
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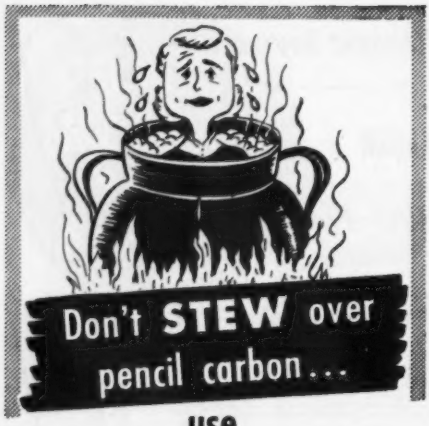

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KLEEN KLEEN

If—like many other offices—you have been having trouble with poor pencil carbon copies of payroll forms, inventory records, etc.—use PEERLESS IMPERIAL *Kleen Kleen.*

Just as its name says, *Kleen Kleen* writes clean, handles clean. Built to take punishment, it lasts longer. Yet it is moderately priced. Don't be content with a "just-as-good" carbon. If your Dealer can't supply test sample sheets, write direct to us.

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General Office and Factory
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Detroit 18, 37 Linden St., River Rouge, Michigan

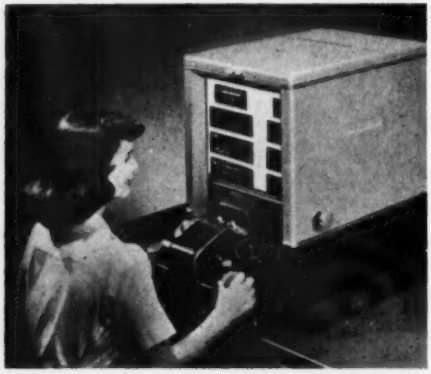
expander. Inserted in the folder are indexed dividers for separating records like insurance, taxes, mortgage, search, legal opinions, application, appraisal and correspondence. This keeps all record on a mortgage instantly available in one place. Fasteners at both ends keep the file flat and prevent loss of papers. Ten folders with indexed dividers are $7.50 postpaid.

STATIONERY SUPPLIES

J. J. Lester & Co., Dept. O, 19 West 44th St., New York 36, N. Y., offers their spring catalog of stationery and office supplies. Catalog has over 300 items like No. 1 grade canary legal 50-sheet pads, 2 doz. at $1.55 a doz., 6 doz. at $1.49 a doz., 12 doz. at $1.44 a doz. Other attractively priced items include pencils and transparent acetate adhesive tapes. Write above address for free copy of this catalog.

MOTORIZED FILM READER

Recordak Corp., 444 Madison Ave., New York 22, N. Y., announces a motor-driven microfilm reader with magnifications of 23, 30 and 40 times by interchanging the lenses. At these magnifications, 16mm film images produced by the standard, duo or duplex microfilming



methods can be viewed at high legibility and eye comfort. A precision-built desk model, this reader has all film loading and operating controls on its front within easy reach, just below the eye-level screen. One knob controls both direction

and rate of film travel across the screen. Scanning speed, in either direction, can be adjusted from slow to high for rapid advancing and rewinding. Another switch provides continuous film movement automatically at any selected scanning speed, for locating a specific image or for inspection. An accessory foot control is also available. Through the use of rotating, optical flats, images remain in sharp focus at all times whether film is at rest or in motion. By turning another control, images may be rotated 360° and placed in correct, upright reading position on the screen. A lateral control moves film from side to side so that its full width can be viewed. This is necessary for duo and duplex films at certain reductions. Facsimile prints of enlarged film images can be made in the reader under normal room lighting by using a special photographic paper; frame and platen are built into the top of the machine. The Recordak Motorized Film Reader is available for immediate delivery with one lens assembly at $825. It rents for $20 a month. Additional lens assemblies and foot switch are extra.

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You are cordially invited to the

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10 A.M.-10 P.M.

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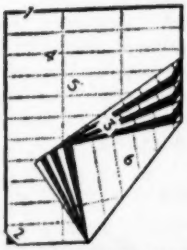


Faster

Better

Cost Less

For Addressing

ONE TYPING MAKES 4 COPIES OF YOUR MAILING LIST. Check these advantages:

1. Specially padded for easy machine insertion.
2. Thumb-tabbed for quick removal of carbons.
3. Non-smudge carbons give better copies.
4. Pinhole perforation allows neat separation.
5. Fine, pure white, first quality paper.
6. Gummed to stick—and stay on.

A PRICE THAT'S HARD TO BEAT!

Also Address Labels *without* Carbons.

Write for free sample and low quantity prices.

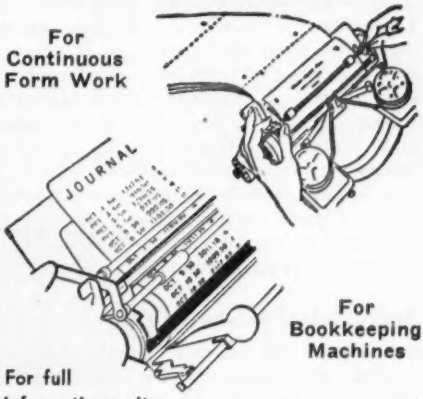
ERIA SPEED LABELS

47 West St., New York 6, N. Y.

Dupli-Typer Ribbon Attachments Make INKED Copies

Increase Production—Reduce Costs

For Continuous Form Work

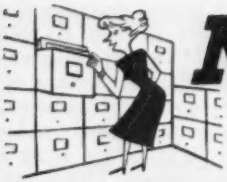


For Bookkeeping Machines

For full information write:

DUPLI-TYPER CO.

456 Fourth Ave., New York 16, N. Y., U.S.A.



NEWS of the Office

Microfilm Conference

The National Microfilm Assn. holds its annual meeting at the Hotel Carter, Cleveland, April 1-2. Program will include papers, panel and discussion groups on all phases of the production, use and storage of micro-reproductions. A comprehensive exhibit of microfilm equipment will include new items publicly shown for the first time. At the luncheon meeting on April 2, the association's annual award for meritorious service to the microfilm industry will be presented. Registration is $5 and includes a copy of the proceedings. Information from Vernon D. Tate, executive secretary, National Microfilm Assn., 19 Lafayette Ave., Hingham, Mass.

Employee Training Course

An Employee Training Course in human relations and work simplification, which can be conducted by the using company's own staff members, is offered by American Supervisory Conference, Inc., 220-02 Hempstead Ave., Queen's Village 29, N. Y. They supply the complete material: instructors' guide books, leader's notes, visual aid charts, practical case studies, notebooks and sample projects, all ready for use. Free examination is offered to executives who write above address on their business letterheads.

Secretaries' Resort-Home

National Secretaries Assn., world's largest association for women in one profession, is planning a home for retired secretaries. It will be also a vacation resort for secretaries who are still active, according to Lilyan Miller, NSA president. A board of five members is working on a plan for operation of the project and checking localities throughout the country for favorable climates. The money is being raised by 300 NSA Chapters.

NOMA Program Shapes Up

The program is nearly complete for the National Office Management Assn. 35th International Conference in St. Louis, May 23-26, according to John W. Dameron, program committee chairman. The banquet address will be made by one of today's most colorful speakers, Calvin D. (Cal) Johnson, former U. S. Representative from Illinois, now with Remington Rand Inc. Theme of the conference is "Equation for Progress." The large number of early registrations and the fact that St. Louis is centrally located indicates an attendance of 1,800. The most extensive office machinery and equipment exposition ever undertaken by NOMA will be held in conjunction with the technical sessions and meetings. Nearly 90% of 40,000 sq. ft. of exhibit space has already been taken.

Navy Lecture Series

More than 60 records management officials of the Third Naval District heard Navy and civilian methods experts during a two-week course on paperwork simplification last month in New York. The 80-hour lecture series was directed by Milton Reitzfield, director of the district records management office. The second week, a joint venture of Mr. Reitzfield and Charles J. Williams, district director of publications and printing, was devoted to forms management and de-

Why *do stationers carry so many grades of boxed typewriter paper?*

BECAUSE paper is made for specific end uses, requiring different characteristics in the paper.

Neenah papers, for example, are designed for "quality." They contain new cotton fibers and are carefully manufactured so they will have strength, permanence and prestige. Naturally, their cost is slightly higher.

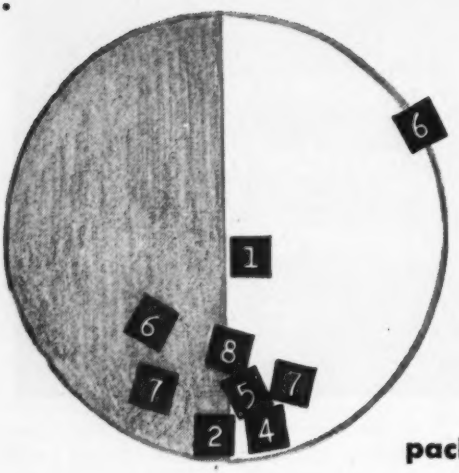
Neenah papers are used for documents, certificates and other valuable uses. When you need typewriter papers that add prestige to your letters, reports and records, we suggest you try Neenah Boxed Typewriter Papers. Then you will be convinced that all papers aren't alike.

And remember, the stationer who carries Neenah Business Papers is also a good source for other quality office supplies.

Neenah
TYPEWRITER PAPERS

NEENAH BOXED TYPEWRITER PAPERS
Bonds and onionskins with from 25% to 100% rag content

NEENAH PAPER COMPANY, ***Neenah, Wisconsin***



packaged arithmetic

Olivetti offers a proved way to increased figure-work efficiency: "*packaged arithmetic,*" provided by the Olivetti Fully Automatic Printing Calculator. Hand this all-purpose machine *any* problem in business arithmetic. It gives back to you all the details of the problem, plus the answer, neatly "packaged" on a printed tape.

The *only* fully automatic printing calculator, made by Europe's largest manufacturer of office machines, it automatically multiplies and divides, and is also a complete 10-key adding machine with direct subtraction. Versatility, speed and dependability make "*packaged arithmetic*" ideally suited to many business operations. More than 10,000 U. S. firms today use Olivetti Fully Automatic Printing Calculators, sold and serviced by over 400 dealers. For information, write Dept. AT, Olivetti Corporation of America, 580 Fifth Avenue, New York 36, N. Y.

olivetti

sign. Among the civilian speakers were Emmett J. Leahy, president, Leahy & Co.; Arthur Barcan, vice president, National Records Management Council; Jack W. Haslett, Shell Oil Co.; William W. DuBois, Union Carbide & Carbon Co.; Ed Freel, Remington Rand Inc.

English OMA Conference

The annual conference of the Office Management Assn. of England will be held at Eastbourne, Sussex, May 13-16. One of the speakers will be R. E. Schellberg of Eastman Kodak Co. who will open a discussion on the need for constant review of office methods.

Elliott Fisher Contest

J. H. Rudd, Hotel Statler, New York, president of the Hotel Front Office Managers Assn., announced *a* speed and efficiency contest for operators of flat-bed Elliott Fisher machines used in typing hotel bills and reservation slips. Contest is open to all and is held in conjunction with Underwood Corp.

Other officers of the association are A. T. Fitzsimons, Hotel Commodore, 1st vice president; A. Rey, Hotel Waldorf-Astoria, 2nd vice president; Frank Grasso, Hotel Taft, secretary; John Roth, Hotel Governor Clinton, treasurer, Directors are D. Shaffer, Hotel New Yorker; D. Woodlief, Hotel McAlpin; W. Reasor, Hotel Sheraton; H. S. O'Brien, Hotel Biltmore. All are located in New York (see photo below).

San Francisco SPAA

The San Francisco Chapter of the Systems & Procedures Assn. of America, in cooperation with University Extension of the University of California, holds its third annual systems conference at the Mark Hopkins Hotel, April 2. Conference theme is "Systematize and Economize."

Wisconsin Conference

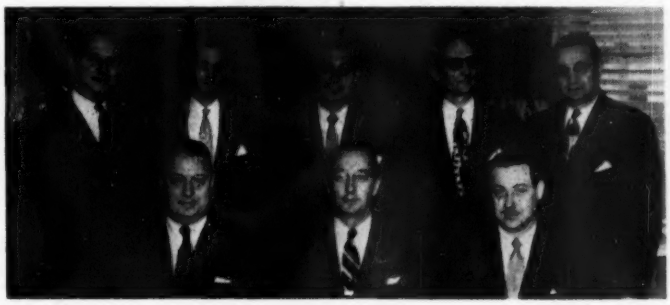
University of Wisconsin will hold a one-day conference on Human Relations at Work, on April 24. Enrollment fee is $12.50. Data from Industrial Management Institute, University of Wisconsin, Box 2098, Madison, Wis.

Iowa Management Course

The College of Engineering of Iowa State University will hold its 15th management course June 14-26. Details from J. Wayne Deegan, 116 Engineering Bldg., State University of Iowa, Iowa City.

OEANY's Silver Anniversary

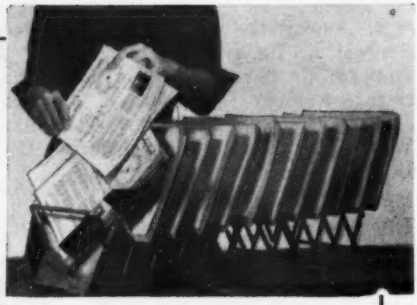
"25 Years Progress in Office Management" will be the theme of the silver anniversary celebration of Office Executives Assn. of New York at the Belmont Plaza Hotel on the evening of April 21. The featured speaker will be Frank L. Rowland, executive director of Life Office Management Assn. and one of those who attended the organization meeting of the



Officers of the Hotel Front Office Managers Assn. Front row: D. Shaffer, J. H. Rudd, A. Rey. Rear: John Roth, D. Woodlief, Frank Grasso, A. T. Fitzsimons, W. Reasor. (See paragraph above.)

COLLATING MAGIC!

Over 3,500 sheets an hour gathered by one worker! Work done in half time and at half cost of obsolete methods of collating. **GUARANTEED** to produce *quicker* and *more accurate* results than any other collating aid on the market.



Evans GATHERING RACK *with* JOGGER

Racks are all aluminum. Each section holds 500 sheets at angle. Jogger, aluminum, fits on end of any TU Rack. As worker gathers sheets, sets are dropped criss-cross into Jogger. As hand lifts forward for more gathering, the handle is tapped—and sheets jog into neat sets ready for removal.

Use two or more racks together for large assemblies. Non-skid rubber on bottom strips keeps rack firmly in place while in use. Racks collapse for setting aside.

SHOWN: 12-section TU Rack with Jogger. Rack is $16.50—Jogger $10.00.
7 other Models from $10.00 to $25.00, depending upon model and whether 6, 12 or 18 sections to rack.

***See Your Dealer or Write:* Evans Specialty Co., Inc., 403 N. Munford St., Richmond 20, Va.**

WORDEN of HOLLAND

No. 620—O.H., 66" x 42"

One of the many beautiful blonde oak desks with overhanging top in the Worden Line. Other styles, types, sizes, etc., available, together with matching chairs and tables.

Our catalog will show you the full line.

THE WORDEN COMPANY
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WORDEN BY HOLLAND, MICH.

New York Office Management Society on April 11, 1929. Chairman for the dinner meeting will be Orrin G. Sherman, vice president, Recording & Statistical Corp., who was president in 1929.

Plans are being made for many special attractions that promise to make the OEA April dinner meeting the biggest and most outstanding in the twenty-five year history of the association.

Free Offset Course

Tom Darling, president, Darling-Payne Corp., 82 Beekman St., New York 38, announced that his company is accepting applications for enrollment in their free course on Multilith operation. Classes are held Wednesday and Friday evenings from 6 to 8 p.m. for three weeks. Instructors are headed by Henry Gonet.

Harold C. Pennicke

Harold C. Pennicke, 58, well known management consultant, died Feb. 28 after a short illness. Mr. Pennicke was with American Central Life Insurance Co. of Indianapolis from 1913 to 1931 when he became vice president of William H. Leffingwell, Inc. In 1937, he started his own consulting firm at Greenwich, Conn. Surviving are his widow, Irene, and daughters, Mrs. John C. Coughlin and Mrs. Newton Cattell.

How Corvair Takes A Talking Inventory

THE use of dictating machines to take inventory is expected to save thousands of dollars annually according to Paul S. Nill, controller of Corvair's San Diego division. More than 12 million dollars' worth of stock will be checked this way annually. Initial use of the system at Consolidated Vultee Aircraft Corp. cut inventory time 60% and lopped 40% off the overall cost compared with stock taking by list and pencil. The talking inventory is completed, verified and available for use in approximately a third the time formerly

MANUFACTURERS OF DURALUMINUM
MANY STYLES HOLDERS FOR HANDWRITTEN SNAPOUT FORMS
SAUNDERS MFG. CO., INC.
P. O. BOX 243
WINTHROP, MAINE

Genuine Engraved Letterheads
FREE DESIGN
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$12.00 FOR 1000
JUST MAIL US YOUR LETTERHEAD. PROOF MAILED WITHIN 5 DAYS. NO OBLIGATION.
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801 SO. 20TH STREET · BIRMINGHAM 5, ALABAMA
America's Largest Engraver of Fine Stationery

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TYPE-RITE
PLATEN
PRECISION
PERFORMANCE
100% GR-S RUBBER
SEND FOR OUR PRICE LIST
Serving The Trade Since 1925
TYPEWRITER EQUIPMENT CO., INC.
409 LaFayette St., N. Y. C. 3, N. Y.

ALL MAKES AND ALL MODELS
CALCULATORS
WRITE FOR OUR PRICES—TODAY!
"America's Largest Rebuilders, of Calculators."
This month's special LA5-160, LA5-200, 100% Rebuilt.
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DESK STABILIZER

A stable typing platform lessens fatigue. This means fewer errors, better typing alignment; and both the machine and the desk last longer.

Check these features:

- Automatic self-locking mechanism, no jamming.
- Adjustable to any height from 17" to 31".
- Positive support of over 200 lbs., no slipping.
- All metal construction, smooth no-snag finish.
- Instantly installed or released.
- Telescopes to fit any desk drawer.
- Will not mar desk or floor.

Pays for itself in a day by reducing typing errors, erasing and retyping.

Order today and let your typists decide if it isn't just what they need to produce better looking, more accurate typing.

Pres-To-line

RETAILS AT ONLY $4.95 EACH TABLE

CORPORATION OF AMERICA

2339 Cotner Ave., Los Angeles 64, Calif.

Dealer Inquiries Invited

needed.

Raw materials and purchased parts that go into aircraft are inventoried. Accuracy is insured through the self-auditing system which includes the use of punched cards. One person can take the inventory since the key to its success lies in good preparation of the stock beforehand: packaging, identifying and sealing the stock items at the time they are received in the plant. Thus, items are ready for inventory at the moment they are placed on the shelf.

The inventory is scheduled in 36 periods a year. Just before a given area is to be inventoried, items are thoroughly checked for packaging and sealing. Identification tags indicating the volume on hand and unit of measurement are attached to the stock. Tags are placed so as to block a shelf or bin from use. The inventory taker uses a portable dictating machine to record the count of each item which appears on the tags as he moves along the warehouse aisles. He

Dictaphone equipment used for taking a fast, accurate inventory at Corvair's San Diego division. The chest microphone leaves stock taker's hands free to hold flashlight and handle stock items.

TYPEWRITERS ALL MAKES

REGAL'S NEW YORK warehouse and 80 stock depots carry a revolving stock of 10,000 machines.

REGALRITE BRAND RIBBONS AND CARBONS

THE UTMOST IN QUALITY
THE LOWEST IN PRICES
Proven—Best by Test—Best for Less

REGAL TYPEWRITER COMPANY, INC.
200 HUDSON ST., NEW YORK 13, N. Y.

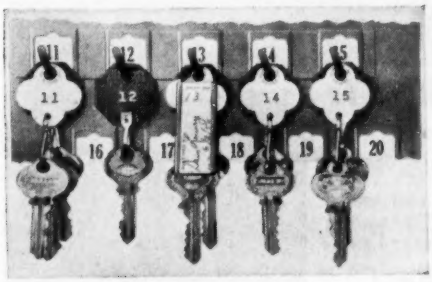
"JUST WHAT WE'VE BEEN LOOKING FOR"

SAY BANKS, CHAINS, OFFICE MANAGERS

WHEELER
SOUND POWERED
Electric TELEPHONES

- NO BATTERIES. No outside power.
- ALWAYS READY IN EMERGENCY.
- Easily installed anywhere.

ASK ABOUT NEW EXECUTIVE TYPE CRADLE PHONE.
THE WHEELER INSULATED WIRE CO., INC.
Division of The Sperry Corporation
1106 East Aurora Street, Waterbury 20, Conn.



TELKEE
Moore Key Control
A method for filing and controlling keys

This is a **complete** line of steel cabinets, system parts and instruction information—everything that you will need to set up your control over keys, whether there are 10 or 10 million.

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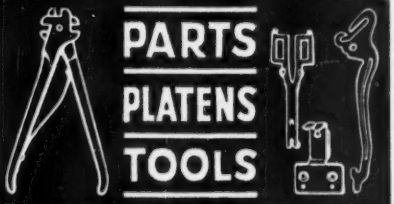


PARTS
PLATENS
TOOLS
ACCESSORIES
for all office machines

Listening to a playback of the inventory, this young lady key punches the stock number and count into punched cards.

speaks in a low voice into a chest microphone attached to 150 ft. of cable leading to the machine to give him a long working range. A flashlight wire is attached to the cable, enabling him to cover dark corners.

Recording belts containing inventory information are taken directly to the key punch room. There a team of girls, using transcribing machines, punch the information into tabulating cards. The cards are summarized and interpreted, and forwarded to the material control section where the records are checked.

Cards are matched against the control records. Discrepancies in the physical count are compared to the records above certain prescribed minimums allowed for error. A recount is made when necessary and adjustments are made according to the results found. The stack of cards goes back to the material department for record correction and then to the accounting department in summarized form for reconciliation dollar-wise. Very little time-saving is reported in the stock preparation, so the major economy is in the actual taking of the inventory. The overall system is viewed as a valuable one for large scale inventories.

GO PLACES with Weldon Roberts Erasers

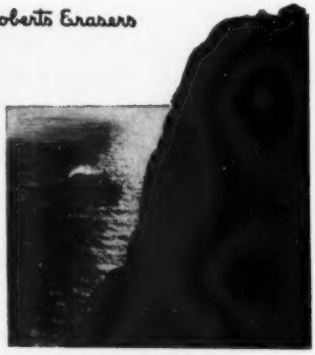
EVEN AT MIDNIGHT in NORWAY

—the sun shines on the renowned quality, dependability and uniformity of Weldon Roberts Erasers.

In the fascinating Land of The Midnight Sun and in lands the world-over, Weldon Roberts Erasers cleanly, superbly "Correct Mistakes In Any Language". There are sizes, shapes and textures which exactly suit your erasing needs. *Ask your dealer!*

WELDON ROBERTS RUBBER CO.
365 Sixth Avenue, Newark 7, N. J.

World's Foremost Eraser Specialists



(Photo courtesy of Norwegian Information Service)

Weldon Roberts Erasers
Correct Mistakes in Any Language

2020 MASTER PINK.
Medium sized, soft pink, super quality eraser of handy elliptical shape. Ideal for pencil work and cleaning, for drawing and for general use.

2020
MASTER PINK
Weldon Roberts Eraser
MADE IN NEWARK, U.S.A.

Reduce Noise, Increase Efficiency with VICTOR'S Exclusive

Super-Quiet CUSTOM ADDING MACHINE

Revolutionary Design Reduces Noise 54%*

Now Victor has surpassed even its own standards of silence in the high-speed Super-Quiet Custom adding machines. With the rugged mechanism "floating" in an exclusive sound-reducing case, Victor Customs are faster, more efficient, quiet as a whisper.

Available in both 10-key and full keyboard models, Victor Customs cut operating costs and simplify figure-work. A movable decimal marker, allows operator to pre-set decimal places, speeds calculation, eliminates counting columns on tape.

There are 42 basic models in the Victor line, for *every size and type of business.*

**Based on scientifically controlled tests.*

VICTOR ADDING MACHINE CO., CHICAGO 18, ILL.

World's Largest Exclusive Makers of Adding Machines. In Canada: McCroskey Systems Ltd., Galt, Ont.

INVEST IN VICTOR

34 YEARS OF QUALITY RECOGNITION THE WORLD OVER

Victor Adding Machine Co., Chicago 18, Ill., Dept. OM-454

Please send free literature on the Victor line including descriptive folder on the *Super-Quiet* Custom adding machines.

Name .....

Company Name .....

Address .....

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NEWS of the Industry

Victor Reorganizes

A. C. Buehler Jr.

Victor Adding Machine Co. announced reorganization of its Negotiated Division that now places A. C. Buehler Jr., vice president, in charge of this phase of the company's operations. With several new products soon to be announced, this growing division has taken on a new importance. Mr. Buehler has the task of coordinating the diverse programs functioning under this division. He will be responsible for the promotion of the new Electri-car and in charge of promotion on electronic instruments such as the system for data accumulation and reduction known as Vic-Dar, plus the supervision of Victor's Department of Defense contracts. Mr. Buehler will also head the company's Executive Division where he will coordinate the company's operating policies and procedures as well as administer its insurance program and maintain the corporate records.

Salomon Heads Royal Metal

Joseph K. Salomon, since 1948 general manager and secretary of Royal Metal Mfg. Co., has been named president of the company to succeed Hobart A. Green who died in January. George C. Lautemann is executive vice president and George H. Lowell, secretary-treasurer. Mr. Lautemann remains president of Royal Metal Mfg. Co., Ltd., of Galt, Ont.

Todd Promotions

Gilbert J. Owen

Promotion of Leonard T. Thomasma to general sales manager of Todd Co., was announced by Gilbert J. Owen, vice president in charge of sales. Named an assistant general sales manager is Robert W. Geoghegan, until now midwest divisional manager. Mr. Thomasma joined Todd in 1928 as a bank supply salesman in Wisconsin; served as manager of sales offices in Milwaukee and Cleveland before assignment to Rochester in 1939 as manager of machine sales. In 1942 he was named assistant

Leonard T. Thomasma

Robert W. Geoghegan

general sales manager. He was made a director in 1948 and elected secretary three years later. Mr. Owens, recently promoted to the sales vice presidency from the post of general sales manager, started with Todd in 1923, was promoted to export manager in 1926, then to general sales manager in 1945 and was elected a vice president in 1947. Mr. Geoghegan started as a salesman in Chi-

office production increases . . .

WHEN YOU USE

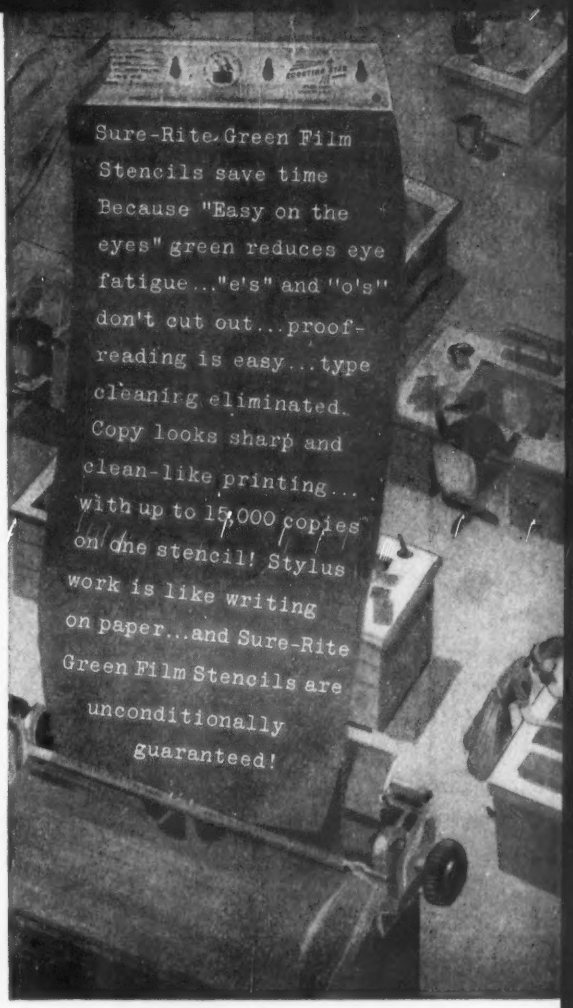
The SURE-RITE Green Film Stencil and the SURE-RITE 999 Speedry Ink

Your staff saves work, saves time, saves money . . . efficiency and production increase . . . when you use this new, finer duplicating combination in your office. Ask your Sure-Rite Dealer to show you how to have duplicated forms printed and dry in seconds. For the name of your Sure-Rite Dealer—and a FREE SAMPLE —mail the coupon today!

The new Sure-Rite Eye-Eze Green Film Stencils are now equipped with the patent-pending Eye Tabs that eliminate the messy glue, are much easier to correct, and are superior in every way.

DEALERS:

You save your customers time and money—increase their office efficiency — when you sell Sure-Rite duplicating supplies. Write today and we'll tell you how you can make more money by keeping your customers satisfied with Sure-Rite products.



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DUPLICATING SUPPLIES

American Stencil Mfg. Co.

Denver 5, Colorado

DEALERS EVERYWHERE

AMERICAN STENCIL MFG. CO.
Denver 5, Colorado

Please rush my free sample of the new Sure-Rite Green Film Stencil and the name of my dealer.

Name .....

Address .....

City .....

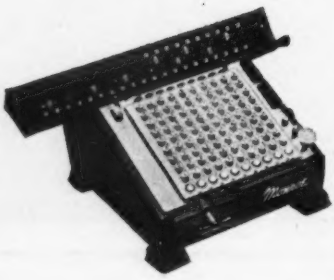
FREE SAMPLE

"In the Midwest, call your local Panama-Beaver Man—always a live wire."

For the Best in Rebuilt and Rough

Monroe Calculators

look to...



Calculator Equipment Corporation

Calculator Equipment Corporation, 556 Central Avenue, Orange, N. J.

cago in 1948, was appointed director of sales training and education and sales promotion manager for commercial products and, since 1952, has been manager of the central division at Chicago.

Head Lincoln Paper Co.

The board of directors of Lincoln Paper Co., subsidiary of Ditto, Inc., announced the election of M. H. Peacock as president, and R. M. Bowen as vice president. Mr. Peacock started in the paper business as a mill hand in 1923. In 1937 he became associated with Lincoln as vice president in charge of sales. He will continue to direct the distribution and merchandising activities of the company. Mr. Bowen, originally with Ditto, Inc., joined Lincoln as general manager in 1951. He will continue to manage the company's operating activities and concentrate on the procurement of Ditto duplicating papers.

Plus Opens Chicago Office

H. R. Mathieu, president, Plus Computing Machines, Inc., announced the appointment of Norman Niemi as general manager and Paul Heche as sales manager of the Chicago branch office opened April 1 at 127 N. Dearborn St.

Scholarship Winners

Ann E. Badger, Youngstown, Ohio, and Howard O. Wold, Minneapolis, 17-year-old high school seniors, are the first annual winners of four-year college educations for children of employees of Pitney-Bowes, Inc.

BFI Annual Meeting

W. N. Ryan

The tenth annual meeting of Business Forms Institute was held Feb. 11-12 in New York. Members were addressed by Al N. Seares, vice president, Remington Rand, Inc. on "How to Factuate Increased Sales and Profits"; Henry J. Perry, director-secretary, Wastepaper Utilization Council, on "Better Quality at a Profit"; and Donald Macaulay, president, Paper Quality Control, Inc., on: "Application of Statistical Quality Control in the Graphic Arts." Institute activities for 1954 will include industry statistical surveys, industrial relations information; productivity surveys, and continuation of the balance sheet and operating ratios surveys, under supervision of Price Waterhouse & Co. Members will meet at Pebble Beach, Calif. in May and at White Sulphur Springs, W. Va. in Sept. W. N. Ryan, president, American Register Co., Boston, was elected president. R. S. Daugherty, president, Shelby Salesbook Co., Shelby, Ohio, is 1st vice president, and Thomas A. Taylor, vice president,

Annual dinner meeting of the New York Office Appliance Managers Assn. at which C. K. Woodbridge, chairman, Dictaphone Corp., was guest speaker.

Schwabacher-Frey Co., San Francisco, is 2nd vice president. Executive secretary is H. M. Meloney, Greenwich, Conn. BFI has 29 forms-manufacturer members.

NOFA Registrations Rising

Keeping in step with its growth, National Office Furniture Assn. conventions year after year have grown in size and importance to the office furniture and equipment industry. According to John R. Gray, executive director, the 8th Annual NOFA Convention-Exhibit at the Hotel Sherman, Chicago, May 8-11, will feature outstanding people from the industry as session leaders. There will be only two speakers from outside the office furniture business: George B. Denny Jr., moderator of Town Hall of the Air, and Robert P. Holston, who will speak at the closing luncheon. The convention-exhibit is designed as a single entity, strictly for office furnishings with no divergent products. The open flow styling of booths is a great asset. It permits easy traffic flow and eliminates bottlenecks. It also helps the exhibitor enjoy conferences with his customers. Advance registrations exceed any previous NOFA convention.

Patent Issued to Rose

Rose Ribbon & Carbon Mfg. Co., Harrison, N. J., announced that U. S. Patent No. 2,671,734 was issued March 9 for its Sta-Clean Metallic Protective Coated Master Units and Spirit Carbons, which are made in black, blue, purple, red and green.

Letterhead Contest

A nationwide contest to select outstanding business letterheads printed on Nekoosa Bond and offering $14,000 in cash prizes was announced by Nekoosa-Edwards Paper Co. Contest closes July 31. Every printer—large or small—has an equal chance because each of Nekoosa's 130 distributors will conduct a local contest just for the printers he services. Entries will be judged by a

FOLDING TRUCKS

TO SOLVE YOUR HANDLING PROBLEMS

IN DOORS AND OUT DOORS

NEW—PRACTICAL—LOW PRICED

for

- OFFICE
- SALES FLOOR
- FACTORY
- STOCK ROOM
- SALES—SERVICE
- DELIVERIES

USED BY 76 KINDS OF BUSINESS FROM A TO Z.

Including nationally known selling organizations—banks—factories—office and government agencies.

CADMIUM PLATED

EASY TO CARRY IN SALESMAN'S CAR OR ANY SMALL SPACE.

CHROME PLATED

USED 101 WAYS

for

EASY—QUICK—1 MAN HANDLING

SOLVES PARKING PROBLEMS

SAVES VALUABLE TIME

In doors and out doors

SAVES THEIR COST QUICKLY

ASK WHAT OTHERS SAY!

We will mail you copies of letters from users in many different lines of business.

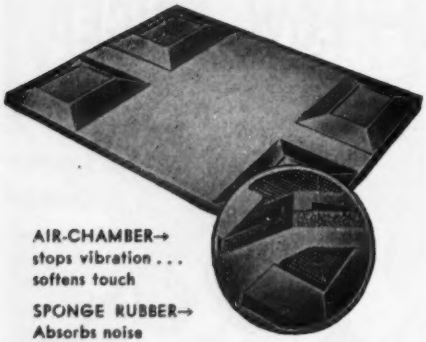
—ORDER 1 ON TRIAL—

IF NOT **100%** SATISFIED — RETURN AT OUR EXPENSE.

The "Regular" and the "Self Balanced 2 Wheeler" Wholesale at $47.25.
The "Heavy Duty"—Illustrated at the top of the page—Wholesale at 54.25.
2% 10 days—Net 30 or take 3 months to pay if desired (by 3 notes—no extra).

FEDERAL CASH REGISTER CO., P.O. Box 2265-K • Kansas City, Mo.

A Ritchie Air Cushion BELONGS Under Every Office Machine



● At last—an attractive pneumatic type cushion that definitely softens the clatter of typewriters (standard and electric) . . . adding machines . . . and all business machines!

● And more than that . . . the RITCHIE AIR CUSHION eliminates fatiguing and costly vibration!

● That is why there is a genuine need for a RITCHIE AIR CUSHION under every machine in the office! It's an inexpensive investment in office efficiency that will pay big dividends in fewer errors caused by jangled nerves . . . and higher production . . . better morale!

DEALERS: The effectiveness of the RITCHIE AIR CUSHION offers unlimited sales and profits to wide-awake dealers. Write for prices and discount data on this EASY TO SELL office necessity.

If your dealer cannot supply you, write

W. H. RITCHIE COMPANY
2555 North Sydenham Street
Box 6924, Philadelphia 32, Pa.

committee of nationally known letterhead specialists. Entries printed by letterpress, lithography or engraving will be acceptable. Local contest prizes for printers will be: 1st prize, $25; 2nd prize, $15; 3rd prize, $10. First prize winners will compete nationally for 1st prize of $250, 2nd prize of $175, and 3rd prize of $100. Duplicate prizes for ties. Details and entry blanks from any Nekoosa paper merchant or from Nekoosa-Edwards Paper Co., Port Edwards, Wis.

New Dealer Meetings

Clary Multiplier Corp. has instituted the Dealer Action Conference for its dealer district managers, according to K. A. Adams, general manager, dealer division. Meetings are designed to equip the managers with new tools and techniques for providing every possible service to Clary's more-than-400 franchise dealers.

SORT-O-FILE
SAVES 20% TO 60% TIME
30 Models. Systems Sorting Service

THOUSANDS IN USE

For fast hand-sorting of cards, checks, letters, invoices, orders, business forms or public documents. We make all types from tiny desk models to shuttle-carriage machines. Write for illustrated circulars.
Representatives everywhere.

Associated Industrial Designers
P.O. Box 12652, Los Angeles 39, California
Plant: 1248 East Sixth Street
Warehouse: New York, Chicago

"SLIP-ON" LABEL HOLDER

SO-1 For 1" Ring Books, 25c ea.
SO-2 For 2" Ring Books, 35c ea
SO-1½ For 1½" Ring Books, 30c ea.

OFFICE PRODUCTS, INC.
9925 Freeland, Detroit 27, Mich.
On Stationery Counters Everywhere

Copy-Craft Appointments

Copy-Craft, Inc., announces appointment of Charles E. Sack, formerly manager of the Washington office, as sales promotion manager with headquarters at the home office in New York. He has been with the company four years. Carl E. Grosskurth is now manager of the Washington office which has moved to larger quarters at 418 8th St., S.E. Mr. Grosskurth has been in the office equipment and supply field in Washington more than 17 years.

Facit Sales Organization

Sender Jaari was named sales manager of Facit, Inc., New York, distributors of Facit calculators, Odhner adding machines and Halda typewriters, it is announced by Erik Ohlsson, president. Mr. Jaari heads a newly created national sales alignment which sets up three major territories under district managers who are in New York, Chicago and Houston. A West Coast sales office is managed by

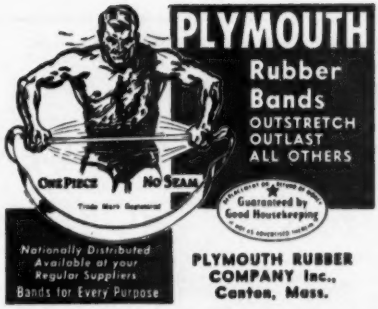
BOTTOM LINE CARD HOLDER

Controlled Front Feed Stop Gives Precision Alignment

FOR FAST, ACCURATE TYPING OF BOTTOM LINE INDEX ON ALL VISIBLE CARDS

10 Card Sizes — $1.85 to $2.30

Ask Your Visible Systems Supplier or write to PALSON MFG. CO. 280 Main St., Worcester 8, Mass.



PLYMOUTH RUBBER COMPANY Inc., Canton, Mass.

AUTOCOPY Duplicator Fluid

For brighter, clearer copies —longer runs! Instant drying prevents offsetting. Non-injurious to machines. Practically odorless. Available in 1 gal. cans or 54 gal. drums. Dealers write for complete catalog!

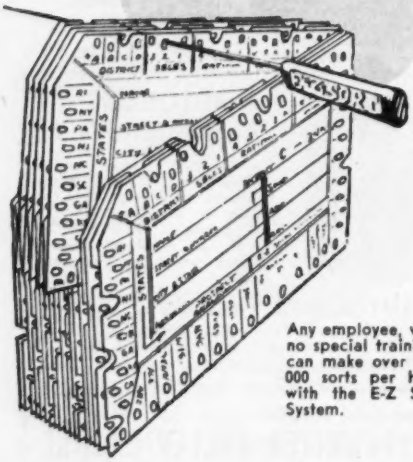
AUTOCOPY, INCORPORATED
12150 South Peoria St., Chicago 43, Ill.
150 West 26th Street, New York 1, N. Y.

For Your Annual
TYPEWRITER ROLLER CHANGE

Insist on a "Futuristic" 5-Star Platen for Best Results

Manufactured and Distributed to Office Machine Dealers by
AMES SUPPLY COMPANY
Contact your Local Typewriter Dealer

E-Z SORT has the ANSWER to your PROBLEM



Any employee, with no special training, can make over 60,000 sorts per hour with the E-Z Sort System.

CONTROLS . . . SIMPLIFIES . . . EXPEDITES

No matter what records you now keep, you will widen your controls, simplify your systems and expedite whatever work your records control—by switching to the E-Z Sort System.

Let us demonstrate the advantages you can gain with E-Z Sort records, tailor-made for any of your office or plant procedures. Write today for facts.

E-Z SORT SYSTEMS, LTD.
45 Second St., Dept. 3, San Francisco 5, Calif.

Sole MANUFACTURERS of E-Z SORT Systems.
Over 50 Offices to Serve You.

Karl Siewert, vice president of Facit, Inc., at 114 Sansome St., San Francisco. Carl Gronhagen is southern regional manager in Houston, Ernst G. Harboe is midwest district manager in Chicago and Louis P. Milano is northeastern manager in New York.

Cash Registers for Dealers

B. M. Wise, managing director, Universal Cash Registers, 95-99 Mansfield Road, Nottingham, England, will be at the Belmont Plaza Hotel, New York, May 6-14, to show dealers five new models of Universal's Accountant Class Cash Registers. Dealerships will be appointed in all states and dealers are invited to make a date to see Mr. Wise and the new machines. Complete information from above address.

For Shipman-Ward in Phila.

C. LeRoy Jones announced that O'Donnell-Brennan Co., 3235 Powellton Road, Philadelphia, are distributors for Shipman-Ward Mfg. Co. Wallace A. Brennan

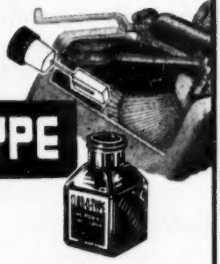
Old Town Course

First class to complete the six-week spirit duplicator sales-service course at Old Town Corp. L. to r., Lindsey Elms, Frederick Urban, William K. Boyd Jr.; George B. Sharpe, field service manager; Grant R. Robinson, chief engineer; George S. Donaldson, sales manager; William C. Raftery, machine division director; James Ware, James Meredith and George Gregoriev.

ABSOLUTELY SAFE . . . NO CARBON-TETRACHLORIDE

Goodbye TO GUM AND GOO!

with the amazing type cleaner...



CLAR-O-TYPE

Cleans type CLEANER . . . Easier! Sturdy dauber prevents spattering. Non-inflammable. Slow-evaporating and therefore more economical. Make your letters SPARKLE. Save time and money . . . as many thousands now do . . . with CLAR-O-TYPE. Once tried, always used.

60¢ *at all stationers and typewriter dealers*

Are You Interested

in news and descriptions of office machines and office equipment on the German market?

Then Read

Burotechnik und Organisation

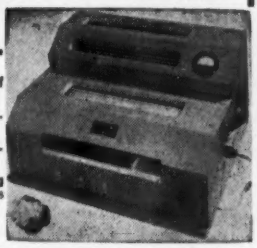
This magazine appears monthly and gives richly illustrated reports of German office equipment and production.

Subscription rate is $5 (U. S.) per year.

Send for a sample copy!

ROBERT GOELLER VERLAG,
Baden-Baden, Germany

OFFICE MANAGERS!
KEEP EXPENSES DOWN
4-WAYS



1. Eliminate hours of costly hand typing
2. Eliminate proof-reading
3. Completely eliminate errors
4. Eliminate sending out for photo copies

WITH

EXACT - PHOTE - COPY

ALL ELECTRIC . . . ALL-IN-ONE UNIT

Get DRY photo copies in your own office automatically in seconds.

It doesn't cost, it pays you to own the new, compact EXACT-PHOTE-COPY machine. There's NO darkroom. NO chemical fumes, NO washing, NO fixing, NO drying. Simple to operate. Produces 60 to 90 copies per hour of anything typed, written, printed or drawn. Size 12" wide by any length, 1-side or 2-sides. 110V AC. Grey vinyl exterior. 47 lbs. Prices start at $105.00.

Made in U. S. A. . . . Fully Guaranteed

Write for FREE brochure today . . .

GENERAL PHOTO PRODUCTS CO., INC.
15 SUMMIT AVE., CHATHAM, NEW JERSEY
Manufacturers of dry and wet process photo copy equipment.

Typing-pencil-heavy ink vanish quickly as a wink...

ALWAYS POINTED AND CLEAN

Blaisdell
KLENZO
PAPER WRAPPED
ERASER
BLAISDELL PENCIL CO., BETHAYRES, PA.

At all stationers—or write for free sample.

EXPORT
BOOKKEEPING
MACHINES
CALCULATORS
TYPEWRITERS
ALL MAKES, Used and Rebuilt
Mail or Cable us your enquiries. We guarantee prompt personal attention, lowest prices and absolutely reliable service.
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DICTATING MACHINE
SALESMEN
Your equipment can be sold for special installations when our "ECHO Verbatim Reporter Electronic," or "HUSH-A-PHONE Voice-Silencer" is added. Be up-to-date and don't miss any bets. Inform yourself.
Write for bulletin "Voice."
HUSH-A-PHONE CORP.
65 Madison Ave. Room 710 New York 16

CASH REGISTER
PARTS
WORLD WIDE SERVICE
HIGHEST QUALITY PRODUCTS
NEW ADDRESS:
International Cash Register & Parts Co.
207 E. EVERGREEN ST., MT. PROSPECT, ILL.

PROFITABLE
FRANCHISES AVAILABLE
Own your own business. Operate a temporary help service with our help. We operate coast to coast—29 offices. Modest funds required for operating capital. Franchises available in cities under 300,000 population. Be a part of nation's largest temporary help service. Step into a profitable business of your own by writing:
MISS WARREN
330 W. Kilbourn Ave., Milwaukee 3, Wis.

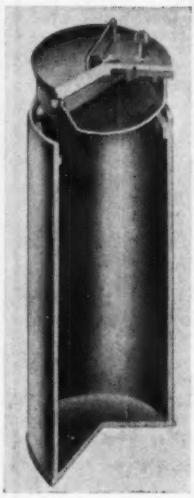
and Martin H. O'Donnell were until recently with Barrett Adding Machine Div. of Lanston Monotype Machine Co.

Mimeo Paper Contest

Groveton Paper Co. is promoting its new Triad mimeo paper with a sales contest for distributor salesmen with prizes ranging from billfolds and sporting equipment to vacations for two in Florida and Bermuda.

National Acquires Paper Plant

To fully integrate its manufacturing facilities, National Vulcanized Fibre, Wilmington, Del., will acquire all outstanding stock of Marshall Bros. paper mill at Yorklyn, Del., and make Marshall Bros. a wholly owned subsidiary of National. Actually, this cements a long-existing working relationship between the two companies. Since 1945, the entire paper output of Marshall Bros. has been utilized by National for Vulcanized

Model B

EXTRA PROFITS FOR DEALERS
Like finding buried Treasure, the *Immediate* Profits you can make filling the pressing need for PILFUR-PRUF SAFES.
Just the thing for small concerns of all types . . . Ideal for the home. Floor safe easily installed in floor flush with concrete. Wall safe installed in walls or fastened to the floor. Ask your dealer for literature or write direct to
PILFUR-PRUF SAFES
2472 Third St., San Francisco 7, Calif.
Product of W. Parks Machine.

Fibre, Phenolite Laminated Plastic, Vul-Cot Wastebaskets and materials handling equipment.

New 3M Office-Warehouse

Opening of a new sales office and warehouse building in the San Francisco area was announced by Minnesota Mining & Mfg. Co., with B. J. Friel as office manager. The building is at 333 Shaw Road, South San Francisco and contains 40,000 sq. ft. of office and warehouse area.

Win Match Book Awards

R. C. Allen Business Machines, Inc., received a bronze "Joshua" plaque for the most distinguished use of match book advertising in the office equipment field in 1953, Charles Furcolowe, director, Match Industry Information Bureau, announced. R. C. Allen also took top group award in 1952. Award certificates were voted by the judges to Codo Mfg. Co., Baltimore Stationery Co., Hiss Stamp

The Right Numbering Machine?

TURN TO THE

GIANT SELECTOR CHART IN

"HOW TO SELL NUMBERING MACHINES"

Speeds sales. Features figure sizes, actions, uses of popular Numbering Machines, Dateers. 50 photos, 60 pages other data.

Yours free — write today.

WM. A. FORCE & COMPANY, INCORPORATED
216 NICHOLS AVENUE, BROOKLYN 8, N. Y.
SALES OFFICES: NEW YORK, CHICAGO, SAN FRANCISCO, CANADA

New INDIANA

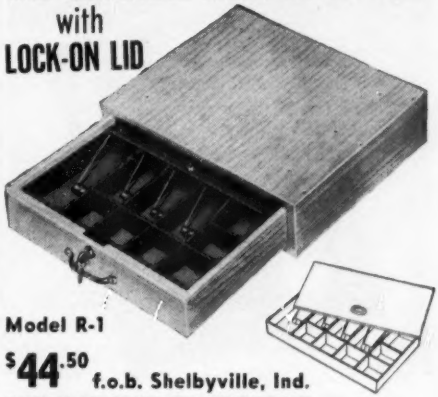
UNDER-COUNTER

CASH DRAWER

with REMOVABLE METAL MONEY TRAY

with

LOCK-ON LID



Model R-1

$44.50 f.o.b. Shelbyville, Ind.

REGULAR DEALER DISCOUNT

Now for the first time Indiana makes available an Under-Counter Cash Drawer —with removable metal money tray.
Overall Dimensions—18⅜" wide x 15⅝" long x 4⅞" high.
Metal Money Tray—15½" wide x 10¼" long x 2¼" deep—6 coin compartments—3 currency compartments —1 ticket compartment. Extra Trays Available.
High-grade Disc Tumbler Locks. Warning Gong rings when drawer is opened. Easy rolling mechanism. Drawer constructed of Indiana Hardwoods. Exterior Office Gray or Natural Lacquer (Basswood) Finish. Shipping weight —approx. 25 lbs.

USE THIS HANDY ORDER BLANK FOR ORDERING SAMPLE

INDIANA CASH DRAWER CO.
SHELBYVILLE, IND.

Please ship ..... Indiana Model R-1— "Under-Counter" Cash Drawers, @ $44.50 less dealer discount, f.o.b. Shelbyville, Ind.

Finish .....

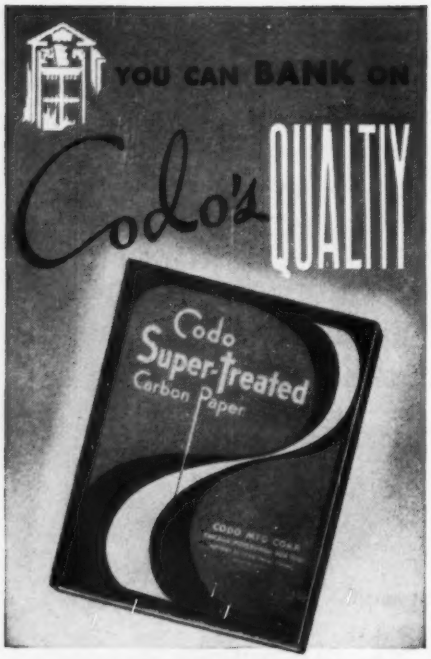
DEALER .....

STREET ADDRESS .....

CITY .....ZONE...STATE.....

SIGNED BY .....

Open account to rated firms only—send references if not rated.



CARBON PAPERS

TYPEWRITER • BILLING • FAN-FOLD
PENCIL • CARBON JACKETS
REGISTER ROLLS

Office work runs smoother when Codo Carbons, Ribbons and Hectograph Supplies are on the job. Codo's High Quality proves itself in sharper, cleaner work and longer service. It's just *good business* to specify CODO.

Codo—MFG. CORP.

Factory: **CORAOPOLIS, PA.**
401 Wood Street, Pittsburgh 22, Pa.
40 E. 40th St. New York 16, N. Y.
564 W. Monroe St. Chicago 6, Ill.

Co., and A. B. Dick Duplicating Products, Chicago. Richard Kowalkoski, R. C. Allen advertising manager, was responsible for the winning match book.

Underwood Star Salesmen

S. P. Zimmerman, Zimmerman's Office Equipment & Supplies, Portsmouth, Ohio, has been named president of the Underwood Corp. All Star Club for 1953. L. A. Harp, Business Equipment Co., Crystall, Texas, is vice president; W. G. Fletcher, Sacramento, is secretary; and L. P. Bahan, Baton Rouge, is treasurer.

Cel-U-Dex Representative

Cel-U-Dex Corp. is now represented in New York, New Jersey, Maryland, Delaware, Pennsylvania, Chicago and the New England States by Arthur J. Lawless.

Retailers-of-the-Year

Maverick-Clarke, San Antonio, Texas, was named Brand Name Retailer-of-the-Year in the office equipment and stationery section of the annual competition sponsored by Brand Names Foundation. Certificates of distinction went to General Office Equipment Corp., Pittsburgh; H.

Dictating Machine Dealer

John F. Kennedy of Utica (N.Y.) Office Supply Co., distributors of Rex Recorder dictating machines.

SLASH MASKING and SET UP TIME

with the

BASE LINE MASKING SHEET!

Try 5 Sample Sheets FREE!

For MULTILITHS No. 1200, 1300, 50
DAVIDSON No. 221

NOW mask negatives in two minutes, pre-setting the plate image within ⅛" of correct position! It's easy with the precision-ruled BASE LINE MASKING SHEET! Slashes press set-up time, boosts output, cuts costs! Hundreds of users, coast to coast. WRITE for free samples, mentioning make and model press!

LITHO ENGINEERING & RESEARCH
3237 Eastlake Ave. Seattle 2, Wash.

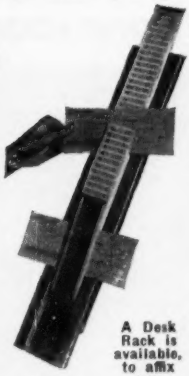
AUTOMATIC WASHER DREGO Model 53

FOR OFFICE MACHINES
Details on Request

WILHELM DREUSICKE & CO., K.-G.
Lutzowstr. 3, BERLIN W 35, Germany

Amfile

4-WAY SORTER



For sorting all kinds of office papers preparatory to final filing or posting. Can be used in four different ways — one side has alphabetical and daily leaves, the other side, monthly and numerical.

The Sorter is only 4" wide and light-weight, made of hammertone finished aluminum with spring aluminum alloy leaves and rubber feet.

A Desk Rack is available, to affix any Sorter to a desk.

STYLE	SIZE	LENGTH	WEIGHT
L-31	Letters	28"	24 oz.
C-31	Cards, Checks	25"	18 oz.
C-21	Checks	16"	12 oz.

If your dealer doesn't have the Amfile Sorter in stock, send his name and we'll see that you are supplied promptly.

Write for illustrated circular

AMBERG FILE & INDEX CO.
Filing Specialties since 1868
1601 DUANE BLVD., KANKAKEE, ILL.

LIKE AN ASPIRIN FOR YOUR BALL POINT REFILL HEADACHE!

1-FOR-ALL
REFILLS BY FISHER

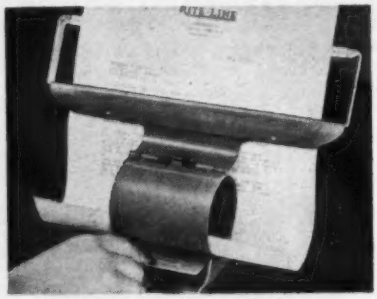
THE AMAZING NEW INVENTION THAT FITS PRACTICALLY ALL BALL POINT PENS

FAIR TRADED AT 49c

AS ADVERTISED IN LIFE

Order from YOUR STATIONER

Manufactured by The FISHER PEN COMPANY, Chicago 13, ILL.



RITE-LINE COPYHOLDER

WITH THE NEW TELESCOPIC EYEGUIDE

Accommodates all widths of copy from a machine tape to 20 inches. Price, including the new Telescopic Eyeguide: **$17.75** TAX EXTRA

FREE TRIAL OFFER. Write, asking us to send you a RITE-LINE Copyholder with the understanding you may return it without charge within ten days.

RITE-LINE CORP. 1025 15th Street, N. W. Washington 5, D. C.

SPECIAL OFFERING

on REBUILT & ROUGH OFFICE MACHINES

Complete Selection of

ADDERS, CALCULATORS, TYPEWRITERS, BOOKKEEPING MACHINES, ADDRESSING EQUIPMENT

We offer fair prices, guaranteed rebuilding, prompt service to users and dealers the world over.

Write Dept. W.

Send for our special price list today.

INTERNATIONAL OFFICE APPLIANCES, INC.
326 Broadway, N. Y. 7, N. Y. HAnover 2-6700
Cable "ADDBOOKAL"

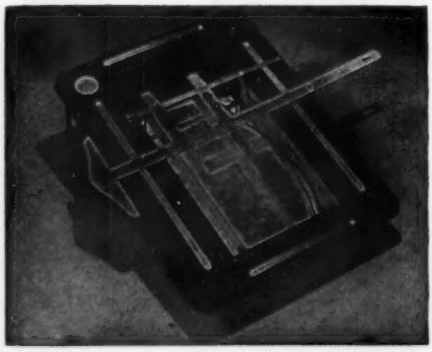
PAYCHECK "OUTLOOK" ENVELOPES

Eliminate Time and Expense of Addressing, also Chances of Error.

Paycheck "Outlook" Envelopes are absolutely opaque, essential when wages are paid by check. Nothing shows but the employee's name. This improves personnel relations.
Send us check you now use and we will submit sample Paycheck "Outlook" Envelope and prices based on your estimated yearly requirements.

OUTLOOK ENVELOPE CO., *Est. 1902*
Originators of "Outlook" Envelopes
1001 W. Washington Blvd. Chicago 7, Illinois

TECHNYSCOPE MODEL F-2



(Illustrated with glass removed)

The use of FLOURESCENT LIGHTING introduces an entirely new standard of scope illumination. The glass of the Scope and stencil remain cool. The entire writing area of the stencil is amply and evenly illuminated.

Complete Price $35.00

Request information from

TECHNYGRAPH COMPANY, TECHNY, ILL

W. Clopp & Co., Trenton, N. J.; Business Equipment Corp., Boston; Lucas Bros., Baltimore.

BIF Exhibitors

Advance catalogs of the British Industries Fair, May 3-14, can be had free from British Consulates. Office equipment and stationery will be exhibited in London.

Ira Cole

Ira Cole, vice president in charge of sales of Mittag & Volger, Inc., until his retirement in 1948, died recently at his home after a long illness. Mr. Cole's life was marked by a number of distinguished accomplishments. He joined Mittag & Volger as a ribbon packer upon graduation from high school and earned rapid promotions which brought him into the sales department as a correspondent and ultimately to the vice presidency. He also was Mayor of Park Ridge, N. J.

Franklyn H. Eichhorn

Franklyn H. Eichhorn, 46, advertising and sales promotion manager of Eberhard Faber Pencil Co., died Feb. 14 in Jamaica Hospital ten days after an abdominal operation. Mr. Eichhorn joined Eberhard Faber in 1926 in the advertising department. He was later appointed assistant advertising manager and won the post of advertising and sales promotion manager in 1940. An active member of the company's 25 Year Club, he was a well known figure in the pencil industry. He is survived by his wife, Katherine Whipple, daughter, Claire Eichhorn, and father, Frank C. Eichhorn.

Edward Berger

Edward Berger, head of the west coast division of American Stencil Mfg. Co., died Jan. 28 in Prescott, Ariz., from a heart attack. Mr. Berger was associated with the company since it was formed in 1945.

It is with great pride that we introduce to you the Safeguard Checkwriter and the amazing NEW Safeguard Checksigner, a perfectly balanced pair of office machines that will give you top office efficiency—with a safe lasting impression. Write today for additional information on the various all purpose model Checkwriters and Checksigners.

OVERSEAS DIST. — SAFEGUARD INTERNATIONAL 3312 LANCASTER AVE.—PHILA. 4, PENNA., U.S.A.

SAFEGUARD CORP LANSDALE, PA.

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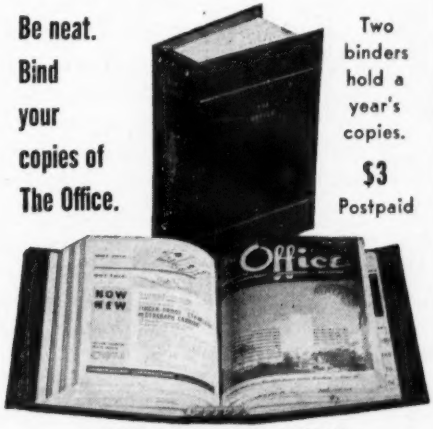
Be neat. Bind your copies of The Office.



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$3 Postpaid

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270 Madison Avenue, New York 16, N.Y.

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- SAVE FLOOR SPACE.

The OFFICE VALET®

Provide check-room efficiency. End locker room evils—fit in anywhere. Accommodate 3 (or 6) persons per running foot—coats, hats, umbrellas, overshoes. Lifetime welded steel construction. Modern baked enamel finishes. Sold by quality office furniture dealers everywhere.

Checker® Commercial, industrial and institutional wardrobe equipment and complete checkrooms.

VALET RACKS® Stationary and portable Wardrobe and Locker Racks for the office and the home

VOGEL-PETERSON CO., 1121 W. 37th St., Chicago 9, U.S.A.

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AMERICAN CANCER SOCIETY

As We See it

Automation

FOR a long time we have listened to the office being criticized because it lagged behind the factory in both modern management principles and modern work methods. The criticism was justified and, in many instances, constructive. It provoked a lot of thinking among people in office management and among office equipment manufacturers. The results of that thinking are beginning to appear and there is now reason to believe that office management will not only equal the achievements of factory management but surpass them—unless the factory speeds up its own automation and, of course, it is striving to do just that.

Automatic operation for clerical routines is here for offices that want it and can afford to use it profitably. It will never be feasible for every office any more than present assembly line procedures are profitable or desirable for all industries. With the exception of government and companies like those in the insurance business (whose "factory" was always the office), the types of businesses which are most quickly taking to office automation are those accustomed to modern methods in their plants. However, there will be exceptions to this parallel since many of the distributing businesses are proving receptive prospects for automatic record keeping equipment.

The ultimate achievement of the automatic office, or factory, will be realized only after basic rethinking. Present divisions of labor, responsibility and authority must be radically altered. Present lines of organization must be redrawn or eliminated and the internal empire builders will suffer grievously.

If ever you have felt badly, being an office executive, because your friends in the factory had more advanced equipment and methods than you had to work with—maybe you can soon turn the tables on them. Factory management folks have been thinking about an automatic factory since the birth of the assembly line—long before there was any thought of it for offices. Now the office has caught up and we may well see the day when the office will make the most modern factory look old fashioned. When factories *are* automatized, then what? Why the office can take over the factory's operation. The office will issue the instructions in the form of a common language medium which will operate the necessary factory equipment. Some will say it's the factory taking over the office, and that argument probably will continue until our generation dies out.

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